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# THE NORTH HIGHLANDS OF PERU



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## EXCAVATIONS IN THE CALLEJÓN DE HUAYLAS AND AT CHAVÍN DE HUÁNTAR

WENDELL C. BENNETT

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## PREFACE

THIS EXPLORATION in the North Highlands of Peru represents the fifth expedition in the Andean program of the American Museum of Natural History. Introduced by the survey of Dr. Ronald L. Olson in 1930, the program was continued by the author in Bolivia in 1932 and 1934, and on the North Coast of Peru in 1936. Three reports have already been published.<sup>1</sup> The work was financed by the Frederick G. Voss Anthropological and Archaeological Fund.

My wife and I sailed from New York on January 1, 1938, arriving in Lima on the fourth of February. We had the pleasure of spending ten days en route on the Island of Barro Colorado in Gatun Lake, Canal Zone, through the courtesy of Mr. James Zetek and Dr. Frank M. Chapman. After twelve days in Lima, securing a permit and equipment, we proceeded to the town of Huaraz, via plane to Chimbote, train to Huallanca, and motor to Huaraz. Today, the whole Callejón de Huaylas is accessible by automobile via the new road up the La Fortaleza Valley.

A total of two months was spent in the general region of Huaraz. The local museum, under the direction of Dr. Augusto Soriano Infante, contained a representative collection of ceramics and over 125 stone statues from the area. Exploration in the region led to intensive excavation around the ruins of Wilkawain and Ichik-Wilkawain, and minor testing at a number of other sites. These ruins and excavations are described in detail in the body of this report.

Ten days were devoted to the region of Carhuaz, particularly the ruins of Copa Chica, where minor excavations were effected. The collection of the La Rosa Sanchez family in Carhuaz is said to have come from their Copa Chica Hacienda, and a reasonably large collection in the Museo de la Universidad de San Marcos was obtained by Dr. Julio C. Tello from the Copa area.

Eight days at Katak, near Recuay, permitted examination of a dozen sites in the region. The famous Macedo Collection in Berlin came from this section, and the name Recuay has thus been applied to one style of ceramics. Dr. Julio C. Tello has excavated sites in this region, and we tested several others.

Twenty-six days at the famous site of Chavín de Huántar allowed the excavation of 16 pits in these ruins, a chance to examine much of the little known stone carving, and a general review of the site. The excavations uncovered pottery of Chavín style and several post-Chavín styles. These are treated in detail in this report.

Following this work in the North Highlands, we spent ten days at Chiclín Hacienda in the Chicama Valley with the Rafael Larco Hoyle family. A further study of their famous collection was made in the light of our recent discoveries. A final month was spent in Lima, studying the collections in the various museums and arranging for the division of our collection, part of which is now in the National Museum of Peru, and part in the American Museum of Natural History. We returned to New York on July 25.

To thank individually all the numerous persons who assisted us in our work in Peru is obviously impossible. To the Honorable General Oscar Benavides, President of the Republic of Peru, and to Dr. Ernesto Montagne, Minister of Public Instruction, we wish to express our gratitude for their continued interest in the archaeological investigations of the American Museum. Dr. Luís E. Valcárcel, Director of the National Museum of Peru, and Dr. Julio C. Tello of the University of San Marcos continued, as formerly, to give every assistance and attention. Dr. Alberto Giesecke and Sr. Jorge Muelle were among the many who aided us in Lima. Both Dr. Augusto Soriano Infante and Sr. J. Eugenio Garro accompanied us as official government representatives in different periods of our work. To both we express our pleasure for their good company, useful assistance, and collaboration. Dr. Emiliano Cáceres of Lima kindly presented us with many useful letters of introduction. His brother, Sr. Ludovico Cáceres, was our good host in Katak. Sr. Tomás La Rosa Sanchez invited us to use his hacienda at Copa Chica. Dr. Rafael Larco Herrera, and his sons Srs. Rafael, Constante, and Javier Larco Hoyle offered their kind hospitality at Chiclín Hacienda. To these and to many others we wish to offer our sincerest thanks.

WENDELL C. BENNETT

October 14, 1942

<sup>1</sup> *This Series*, vol. 34, pt. 3, 1934; vol. 35, pt. 4, 1936; vol. 37, pt. 1, 1939.



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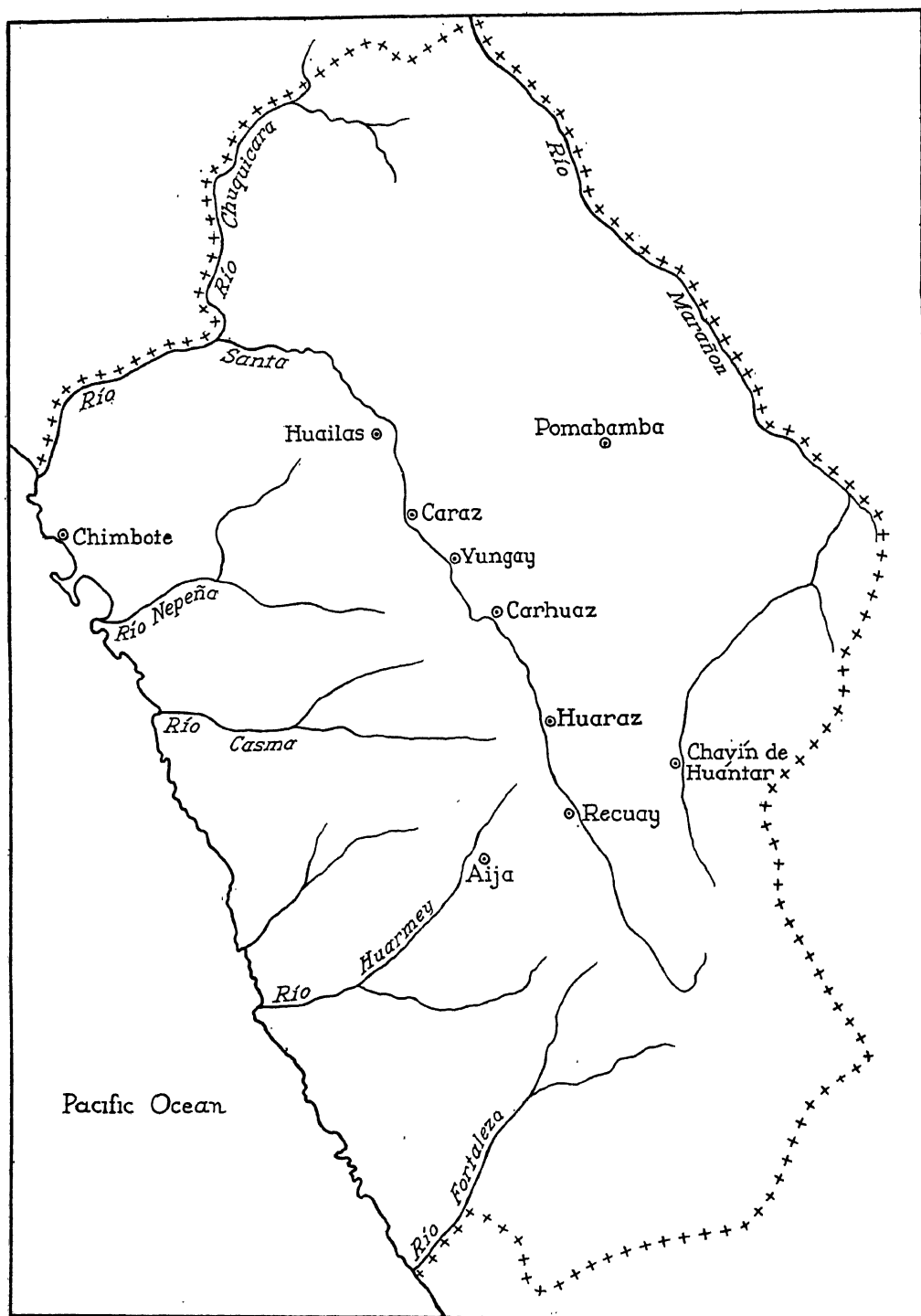


FIG. 1. Map of the Department of Ancash, Peru.

## PART 1. EXCAVATIONS IN THE CALLEJÓN DE HUAYLAS

### THE GEOGRAPHIC SETTING

THE CALLEJÓN DE HUAYLAS (Fig. 1) is the basin of the Huaraz River, the principal mountain branch of the Santa. The Huaraz originates in Lake Conococha at 3944 meters altitude and flows north northwest between the two mountain ranges called the Cordillera Blanca and the Cordillera Negra. At the northern end of the Callejón, the Huaraz River cuts through the Cordillera Negra forming the fantastic Cañón de Pato, after which it is joined by the Chuquicara River to form the coastal Santa. The intermontane Huaraz and the coastal Santa are both frequently designated by the term Santa. As such, the Santa forms the largest river on the west coast of Peru, rivaled only by the Chira in the north. Kroeber<sup>1</sup> quotes Adams' statistics indicating a basin for the Santa of 10,500 square kilometers, of which only 800 square kilometers refer to the coastal section. In spite of the large run off, estimated as averaging 5093 million cubic meters per year, the river is not navigable. Likewise its coastal and intermontane sections are so sharply divided that two distinct regions are formed. Archaeologically, the coastal Santa must be treated with other north coast valleys, while the Callejón de Huaylas forms a distinct unit.

The Callejón is effectively shut off from the rest of Peru by its two flanking mountain ranges. The Cordillera Blanca along the eastern side is composed of a long series of snow-covered mountain peaks, many of which rise well above 6000 meters in altitude. Some of the outstanding peaks are Ranropalca, Copa, Huascarán, Chopicalqui, Contrahierbas, Hualcán, Huandoy, Aguja Nevada, Artesonraju, Santa Cruz, and Chacaraju. Borchers<sup>2</sup> gives an excellent description of these, and also includes the best map of the Callejón de Huaylas. The Cordillera Blanca is crossed by mule trails above snow line. At all times it has formed an effective barrier, although more noticeable in terms of modern transportation than in the past.

The Cordillera Negra along the west side of the Callejón de Huaylas is less majestic than the Cordillera Blanca, although still a formidable range. Peaks rise to 4853 meters and most

passes are over 4200 meters. Until very recently communications from the coast to the Callejón were limited to the railroad from Chimbote to Huallanca and thence by truck through the Callejón, and to combination truck and mule-back trails up the coastal valleys such as La Fortaleza, Huarney, Casma, and Nepeña. Today an automobile road has been opened through the La Fortaleza Valley. In the past considerable mutual influence existed between the coast and the Callejón, although not to the extent of wiping out the local character of each area.

The mountain ranges which flank the Callejón de Huaylas are rich in minerals, and numerous mines are operated in the search for gold, silver, copper, mercury, iron, lead, sulphur, coal, and salt. The principal occupation, however, is, and long has been, farming. The numerous tributaries to the Huaraz River make water abundant in all parts. The area is within the direct rain belt and besides has considerable underground water seepage which makes irrigation unnecessary. The intermontane character of the valley produces rich soils. In general the region is so broken up by foothills and streams that the average farms are small. Today small haciendas and some *comunidades* are the rule, and the archaeological evidence indicates a similar concentration in small village units in the past. Population centers are found at regular intervals in the Callejón. The principal central towns from north to south are Huaylas, Caras, Carhuaz, Yungay, Huaraz (the capital of the Department), and Recuay. Farther south the swampy wind-blown Pampa de Lampas supports some grazing, but little farming. According to Raimondi (1873) the ruins of rather good-sized temples were found in each of the principal modern towns, so that one gathers that the population centers were about the same in the past.

The work of this expedition was limited to the Provinces of Huaraz and Huari in the Department of Ancash. The principal work was around the town of Huaraz, with more limited exploration near Carhuaz and Recuay. The work in Huari was limited to the ruins of Chavín de Huántar, reached by crossing the Cordillera Blanca by mule from the town of Olleros.

<sup>1</sup> Kroeber, 1930, 76.

<sup>2</sup> Borchers, 1935.

## HUARAZ SITES

In the following pages are listed the sites which we examined in the region of Huaraz. The list is by no means a complete survey of sites in this area. Reports on other sites both here and in the whole Callejón de Huaylas may be found by consulting Tello,<sup>1</sup> Raimondi,<sup>2</sup> the chapter by Hans Kinzl in Borchers,<sup>3</sup> and Middendorf.<sup>4</sup> On the basis of our investigation some of the sites merit no more than this listing. Others, at which we did more extensive excavation and survey, are included here for completeness, although the detailed descriptions are reserved for the sections following. Field numbers of some of the sites are included.

1. Pomakayan. In the northern part of Huaraz itself are the remains of what Tello<sup>5</sup> has described as a large, terraced, truncated pyramid with interior stone-lined galleries. Raimondi<sup>6</sup> reported dressed stones as part of the facing and the excavation of a cut-out stone bathtub. He also mentions that statues were not found here, in spite of a popular belief to the contrary. The pyramid is now badly destroyed, and we attempted no more than a cursory examination.

2. Patay Katak (Site 3H). In a section at the northern edge of Huaraz itself some 27 mounds have been reported, although most of them are now hard to distinguish. One such mound contains a stone-lined and once covered pit about 3 meters long, 1.5 meters wide, and 2 meters deep. The walls are of rough stones set in rows. Another mound contains stones which have been roughly dressed, and a doorway with a stone lintel. These mounds have long since been opened, and further work at the site did not seem practical. A collection of sherds in the Huaraz museum is said to have come from this site. Several styles are represented, among them a fairly good Coast Tiahuanaco including:

- 9 Pieces of straight-sided "kero" goblets
  - 5 Black, white-on-red with trident and other designs
  - 2 Black geometric design with white outline on a red base

- 1 Black, brown, yellow, white-on-red
- 1 Black, yellow-on-red with squared face and trident headdress
- 4 Pieces of round-bottom cups
  - 1 Black, white, gray-on-red geometric design
  - 3 Black, white, gray-on-red with circle plus four attached hooks
- 1 Black-on-red piece of an angular-bodied open-bowl

The designs and shapes of these fragments correspond closely to the style found by Uhle at Pachacamac and labeled "Epigone" by him. Complete pieces of this same style may be seen in collections from the Callejón de Huaylas, and one assumes that isolation of the type should be possible.

3. Akobichai. On a hill slightly north of Huaraz is a stone-lined and covered underground gallery about 8 meters long.

4. Wakrajirka. On a ridge near No. 3 are a number of rough stone walls which may once have outlined some structure.

5. Wancha. In the same general region of the above sites are two large upright stones and some miscellaneous walls.

6. Kepijirka. Another meandering series of walls with much recent displacement is found in the region of the above sites.

7. Shankaiyan (Site 1H). On a hill to the north of Huaraz on the property of Sr. David Alvarado a number of subterranean stone-lined and covered galleries have been excavated. Three days' excavation allowed us to complete the uncovering of one gallery which had already been opened, discover and excavate a new one, and find two stone-lined box graves. The collection of six complete vessels, 620 sherds, and eight copper fragments is described later as a sample of Recuay style.

8. Kekamarka (Site 4H). East of Huaraz on a ridge between the Rio Hauqui and Rio Quilcay is a rocky outcrop with several natural flat terraces augmented by artificial stone terraces. The ruins are extensive and consist of terraces, walls, and some delimited rooms, rectangular in shape and about 7 by 2 meters or smaller. The walls are made of double facings of stones filled and chinked with smaller stones. Uprights are not common in the wall construction. A large granite block, 2.5 meters long, 1 meter wide, and 50 centimeters thick, has a relief figure cut

<sup>1</sup> Tello, 1929, 1930.

<sup>2</sup> Raimondi, 1873.

<sup>3</sup> Borchers, 1935.

<sup>4</sup> Middendorf, 1893, vol. 3.

<sup>5</sup> Tello, 1930, 273.

<sup>6</sup> Raimondi, 1873, 40-41.

on its convex face. The figure represents a male with raised hands of five fingers each, and separated legs with five-toed feet. Features are in relief, the mouth being rectangular with incised teeth. Roosevelt<sup>1</sup> mentions these ruins and illustrates the carved figure. Two other small statues are found in the ruins, but without definite association. Sherds of plain red and orange occur on the surface. The general appearance, except for the statues, is that of Inca construction.

9. Ayapampa (Site 5H). About 5 miles east of Huaraz, on the same ridge as Kekamarka (Site 4H) are numerous stone houses, uprights, rows of stones, and terraces. Twenty-five of the houses were examined, ten measured in detail, and one excavated. A burial with one vase and five toy vessels was found. The houses and the excavation are described later in the text.

10. San Jerónimo (Site 2H). Just over the bridge which crosses the Santa River in Huaraz is a rocky promontory with remains of crude stone walls. The hill is covered with sherds, many of which have washed down to the road below. A collection of 123 surface sherds from this site are described in the text. All appear to be Inca style.

11. Orojirka. In the hills to the west of the Santa River and slightly north of Huaraz is the hacienda of Sr. Pando. It lies just below the hacienda of Pongor from which came many of the statues now in the Huaraz museum.<sup>2</sup> Long, stone-lined, and covered subterranean galleries have been discovered here. One is over 4 meters long, 1.2 meters wide, and about 90 centimeters high. We photographed four stone statues and measured a previously opened circular tomb 1.5 meters in diameter. We excavated test pits in several parts of this hill, but discovered only one stone box tomb, 35 by 30 centimeters on the sides and 70 centimeters deep. It was lined with four upright slabs and covered by another. Adult bones were the only content.

12. Wilkawain Region (Site 6H). About 13 kilometers north by 16 degrees east of Huaraz lies a section with numerous archaeological remains which we excavated extensively. Actually this region and the four following (Nos. 13-16) all form a continuous area which will be treated as one in the text, subdivided according to the

type of remains. For convenience, a résumé is included here of the actual excavation and exploration in each of the five adjoining sections.

Wilkawain is the name which Tello<sup>3</sup> has given to the three-storied stone temple which is the outstanding construction of the region. Measurements and plans of this temple were made. Slightly to the east of the temple are many houses of one and two stories. Six of these were measured and one excavated (Site 6H-2), resulting in the discovery of a grave with three bowls, some 441 sherds, seven spoon fragments, a stone amulet, and two copper pieces. Many natural boulders are found on the slopes of the hills, and under some of these boulders are graves of stone box type. Four test cuts under boulders uncovered three graves (Sites 6H-3 and 6H-5) containing a total of nine vessels. Two small test pits in the region (Sites 6H-1 and 6H-4) furnished a few unimportant sherds.

13. Ichik-Wilkawain (Site 7H). Slightly southeast of the previous region and adjacent to it is another area with numerous archaeological features. A three-storied temple differing from Wilkawain temple in size and arrangement of interior rooms is the dominant structure in the section. A plan of this was made. On a terrace below the temple four deep stone-lined graves were found (Sites 7H-1, 2, 3 and 4). The pottery found on the floors of these graves had evidently been broken even before the graves had been filled and the slab covers put in place. The result is a large collection of some 2208 fragments of clay vessels, 27 complete bowls, 25 toy vessels, and four clay spoons. The sherds may eventually result in some 72 more restorable vessels. In addition to pottery, seven flint and obsidian lance points, four copper pieces, and six miscellaneous stone artifacts were found.

One house site excavated (Site 7H-5A) contained one olla, a figurine, seven toy vessels, and 148 sherds, some of which are partially restorable vessels.

Seven stone-lined and covered subterranean galleries were seen (Sites 7H-5B, 8, 10, 12, 13, 14, 16). While some of these had apparently been opened before, two (Sites 7H-12, 13) were definitely intact, and all yielded at least some sherd material. The material from all the galleries is not great in quantity and is largely

<sup>1</sup> Roosevelt, 1935, 33, 36; Figs. 17, 18.

<sup>2</sup> Raimondi, 1873, 40-41.

<sup>3</sup> Tello, 1929, 44; 1930, 272.

fragmentary. In total we found three complete vessels as well as 136 sherds, two copper pieces, two shells, and a stone bead. All belong to the Recuay style.

Again stone box tombs were sought under natural boulders. Ten were found (Sites 7H-6, 7, 9, 11), all but two without artifacts. Of the two, one (Site 7H-7) contained a complete bowl, and the other (Site 7H-6) contained twelve beads, three silver fragments, and a piece of copper. Finally, under a large boulder, we found a tomb (Site 7H-15), not of the box type, which contained thirteen vessels of a white-on-red style.

14. Region above Ichik-Wilkawain (Site 8H). On the hill above Ichik-Wilkawain temple two tombs and some slight refuse material were found. The collection contains two complete vessels, two partially complete

vessels, ten sherds, a clay, and a stone whorl.

15. Region below Ichik-Wilkawain (Site 9H). On the hill below the temple of Ichik-Wilkawain are two large house sites under immense flat surface stones. The first (Site 9H-1) contained only 39 sherds. The other (Site 9H-2) was filled with refuse material of a mixed type, including four complete vessels, 829 sherds, one complete spoon, six stone beads, and four copper fragments.

16. Irwá (Site 10H). Across a stream to the east of Ichik-Wilkawain two galleries were excavated. These contained Recuay-style material, including three complete vessels, 131 sherds, a stone bead, and a copper pin head.

In the excavation descriptions which follow, Sites 12-16 will be treated as a single area of the Wilkawain region, and Sites 7, 9, and 10 will be described in more detail.

## THE WILKAWAIN SECTION

The numerous archaeological remains in the general vicinity of Wilkawain are not all contemporaneous. None the less, since the territory is not large, the whole section must have formed a unit at any given period. For field convenience in excavating, the area was divided into five sections (Sites 12-16), but for the purposes of description a grouping based on type remains seems practical. Later a résumé in terms of the time periods suggested can be added. The materials will be described then in the following order:

- a. Temples: 2
  - Wilkawain (Site 6H)
  - Ichik-Wilkawain (Site 7H)
- b. Above-ground house sites: 16 plus
  - Excavation of one house (Site 6H-2)
- c. Deep stone-lined tombs: 4
  - (Sites 7H-1, 2, 3, 4)
- d. Stone box graves: 13
  - (Sites 6H-3, 5; 7H-6, 7, 9, 11)
- e. Unlined graves: 3
  - (Sites 7H-15; 8H-1, 2)
- f. Subterranean house sites: 2
  - (Sites 9H-1, 2)
- g. Subterranean galleries: 9
  - (Sites 7H-5B, 8, 10, 12, 13, 14, 16; 10H-1, 2)
- h. House-gallery stratification
  - (Sites 7H-5A, 5B)

### A. TEMPLES

#### WILKAWAIN

The most outstanding building in the region is this three-storied stone structure which rises to a total height of 9.25 meters and which, for descriptive purposes, may well be called a temple (Pl. 1a). It stands on a flat platform in part natural and in part artificial, some 54 by 35 meters in extent. Remains of walls surround three sides of this area, although many changes have been made in recent years, and the fourth side is a stone-faced terrace. Today this platform or court is filled with eucalyptus trees which cut off the view, but previously the temple site must have commanded a good section of the Huaraz region. To the west of the temple section the slope is covered with old terraces and house foundations, the same being true of the ridge which continues to the east. To the north and south the slope is sharper, although even today it can be planted with potatoes.

The temple consists of a three-storied central building, 10.7 by 15.6 meters in groundplan and 9.25 meters high (Fig. 2). This central core is surrounded by a terrace, 2 meters high and from 2.1 to 2.3 meters wide, which is well preserved on the north and west sides, but badly fallen on the east and south. The terrace was

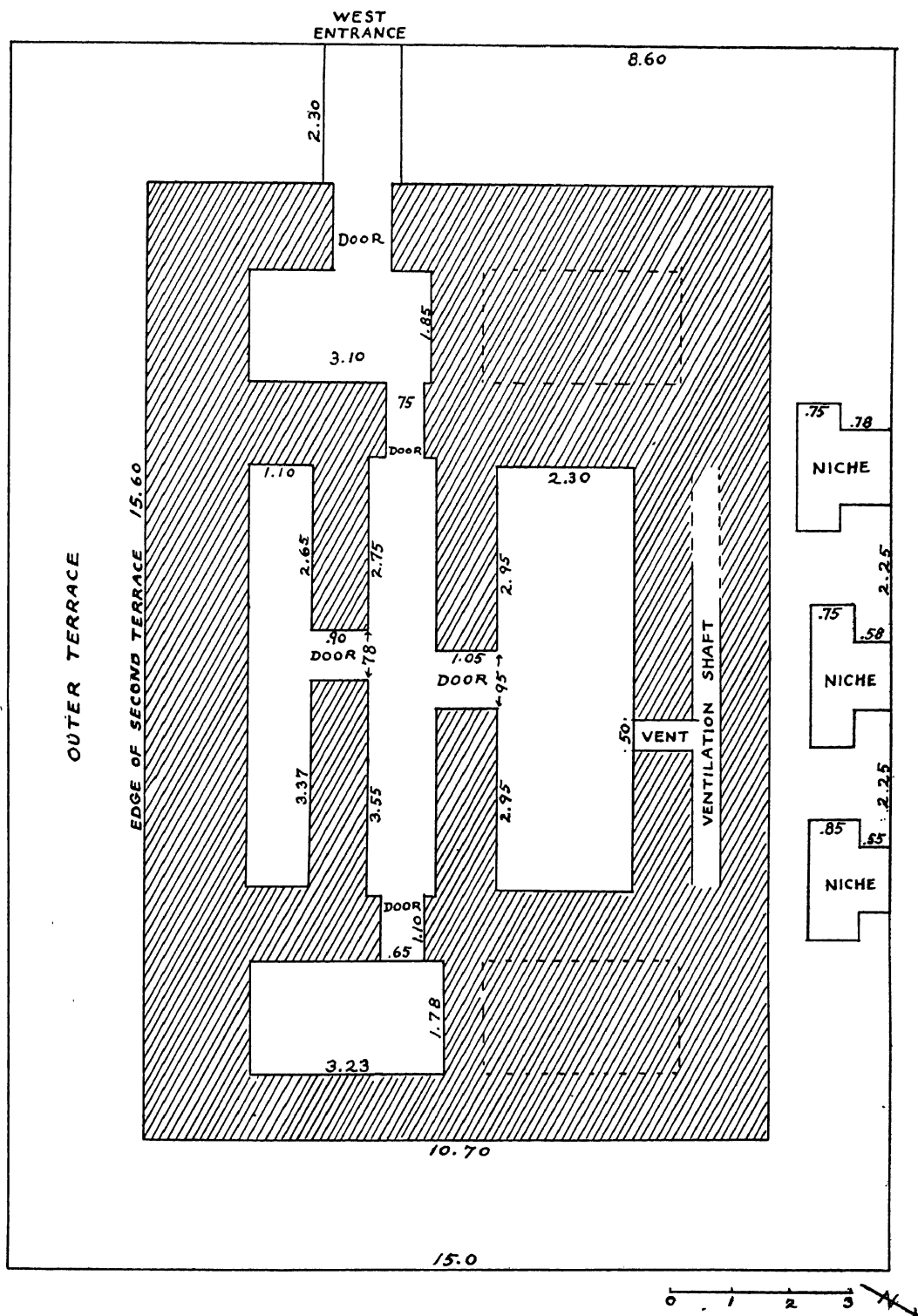


FIG. 2. Groundplan of Wilkawain three-storied temple.



probably built after the central building was completed, since the ground floor rooms not only do not extend into it, but actually have thick side walls independent of it. Along the well-preserved northern side the terrace has three T-shaped niches, more or less evenly spaced. The entrance to each niche is a regular doorway with side blocks and lintel. One door-

eters. To the south are two rectangular gallery-like rooms, each 6.8 by 1.15 meters, separated by a 90-centimeter wall. At each of the four corners of the building is a rectangular room about 3.1 by 1.8 meters. Due to the extent of the stone fill, we were unable to enter two of these corner rooms on the first floor, but the groundplan indicates that they exist.

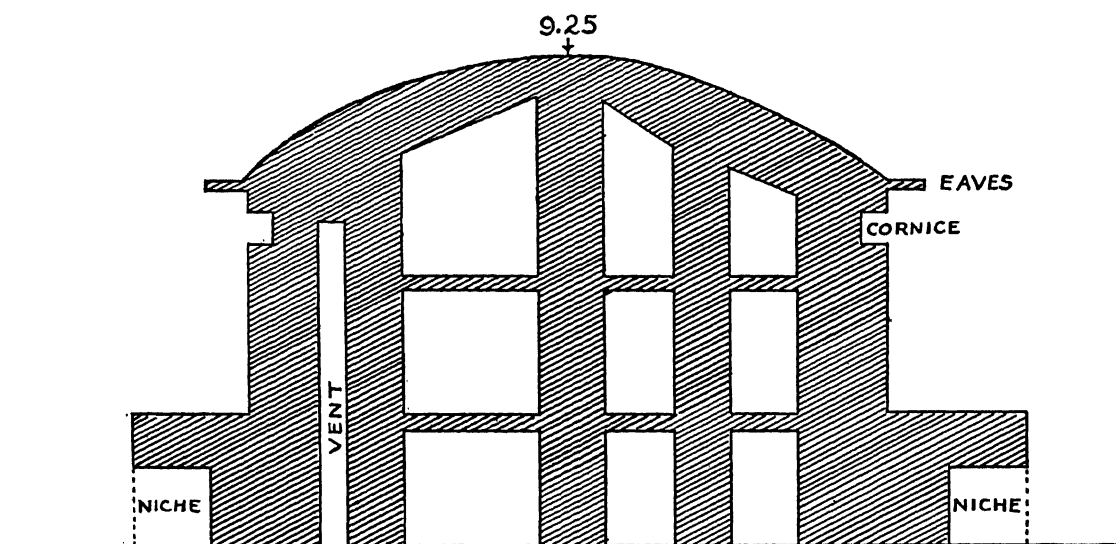


FIG. 3. Cross-section of Wilkawain temple.

way measures 1.15 meters wide, 92 centimeters high, and 78 centimeters thick. The niche proper is 75 centimeters deep and 2.11 meters wide. The other two niches vary slightly from these measurements, but are essentially the same. Although not visible today, it is quite possible that the south terrace also had three similar niches.

Each floor of the central building has seven rooms. Their arrangement can best be appreciated from the plan. Measurements by candlelight in rooms partially filled with stones are none too accurate. Nevertheless the symmetrical plan of the building is obvious. The arrangement of rooms on each floor is identical, the only variation being the communicating doorways. Thus a general description is possible. A central wall about 1.1 meters thick runs the full length and height of the building (Fig. 3). To the north of this wall is a long rectangular room measuring about 6.8 by 2.25

Along the northern edge of the building, from the first to the third floor, is a narrow ventilating shaft about 43 centimeters wide. Vents to this shaft were seen in the large north-central room on the first and third floors and in the northeast corner room of the third floor. Probably at one time all the rooms were served by this shaft. Even today fresh air circulates throughout the building.

Entrance to the ground floor is at the west end, through the surrounding terrace. The second floor is entered from the south (Pl. 1b), and the top floor from the east. No communication from floor to floor was seen on the inside of the building, and the ventilating shaft certainly could not have served this purpose. Likewise windows between rooms were found in only two places on the top floor. They measured 50 by 55 centimeters.

The first and second floors are about 2 meters high. Great slabs form the roof of each room

and likewise serve as the floor of the room above. The roof of the third floor is different. Here the central wall rises to a height of 2.95 meters, while the outer wall of the rooms is only 2.08 meters high. Great slabs slant from the central to the side walls, forming a gabled roof. On the outside dirt and stones are heaped up above the peaked roof, producing a dome-like appearance.

The inner and outer walls of the temple are built up of horizontal rows of large stones, alternating with rows of small stones. Likewise small stones are used to fill all the chinks between the larger ones. In some places remains of clay between stones can be seen. The masonry cannot be called coursed, but there is a definite effort to maintain roughly horizontal rows. Although some of the stones may have been split or cut for fitting, they are not dressed.

The edge of the roof is formed by a series of projecting flat stones weighted down at the inner end. Underneath the eaves thus formed an inset niche, 45 centimeters deep and 55 centimeters wide, encircles the building. Below this decorative niche-band are regularly spaced holes from which carved stone puma heads are said to have been extracted. None remains in position today, but at his house near the temple Sr. Miguel Peñaranda has one such carved head which he says came from this site. This head has a projecting tenon at the back for insertion in the wall. Furthermore, Dr. Soriano Infante has a photograph of a somewhat similar ruin called Catihamá, near Caras, with the cat heads still in position.

Excavation within the temple seemed impractical. Some of the rooms are literally filled with stones, a condition suggestive of intentional obstruction, since no such accumulation would be possible with the walls and ceilings still intact.

#### ICHIK-WILKAWAIN

About one-half kilometer to the southeast of Wilkawain is another temple of somewhat similar construction, but on the whole smaller and less complex. Its present appearance is affected by the fact that the third floor is largely destroyed, so that only the base foundation of the rooms may be seen. The surrounding stones, however, do not suggest the type of peaked roof found at the first temple.

This temple, like the previous one, consists

of a central building of three floors, 16 by 7.2 meters surrounded by a terrace about 3 meters wide and 1.5 meters high. The long axis of the building runs roughly east to west, although not oriented, and in general faces southward. Down the slope in front are terraces, graves, and house sites to be described later. Behind the temple are some ten small ruins, probably house sites, the largest of which measures 9.15 by 6.5 meters and has four interior rooms.

The ground floor of the temple has an entrance through the terrace on the south side, but it was so blocked with stone as to prevent entry. The second floor is composed of three sets of two connected rooms, 2.2 by 3.5 meters, with doorways on both the north and south sides of the building. All doors have stone lintels and side blocks. Inside walls have stones which project some 20 centimeters and inset niches 36 by 38 centimeters, and 26 centimeters deep. The eastern set of rooms has a total of five niches and fourteen projecting stones. The top floor has six rooms, today barely distinguishable by their remaining low walls.

In general the stone masonry is of the same type construction as that of Wilkawain, with horizontal rows of large and small stones. The inner walls are finished in the same fashion with smaller stones. Good evidence of clay cement is found on the inside. The roof of the second floor is composed of large stone slabs.

#### B. ABOVE-GROUND HOUSE SITES

Mention has already been made of house sites on the terraces around Wilkawain temple and behind Ichik-Wilkawain temple. These and other houses in the area are variations of but one style, differing in such details as floors, niches, and the number of rooms. The construction is in general similar to that of the temples, but less carefully done. The use of large stones with smaller ones filling chinks and roofing of large stone slabs is the technique used throughout. The stones in the house sites seem even less worked than those in the temples. They are somewhat selected, but certainly neither split nor dressed. Also less attention is paid to maintaining the horizontal rows.

Six house sites on the slope to the east of Wilkawain temple were examined in detail and one was excavated. Another house site (Site 7H-5A) was excavated, but the description is reserved for special discussion later. In all cases

dwellings consist of single-unit buildings separated from each other by some 7 to 30 meters and scattered between walls and terraces.

House 1 (excavated).

House 2. A two-story building has an upper floor, 4.6 by 7 meters with a lintel-covered doorway to the south, 90 centimeters wide. The walls are 90 centimeters thick and still stand over 1.5 meters high. The large roofing slabs have caved in. This second floor rests on a terrace covering an area of 8 by 9.6 meters and 1.5 meters high. A doorway on the east enters the ground floor through the terrace.

House 3. This one-room building measures 2.1 by 2.65 meters.

House 4. A badly destroyed building measures 3.1 by 5.4 meters.

House 5. A one-room house measures 2.3 by 3.45 meters with walls still 2.5 meters high. A lintel-covered door to the south is 65 centimeters wide. The fallen roof seems to have been a corbeled dome of stones covered with dirt.

House 6. The foundations of this house measure 3 by 3 meters.

#### EXCAVATION OF HOUSE 1 (SITE 6H-2)

House 1 measures 4 by 3 meters on the outside, with walls from 60 to 80 centimeters thick, leaving an inside measurement of 2.52 by 1.78 meters. The walls are made of large and small stones, plus clay cement. The inside was completely filled with dirt and stones, and the large roof-slabs, while partially fallen, still topped the pile. When cleared, the height of the room on the north side was 2.9 meters, but no doorway was found. Likewise, the fill of the inside of the house contained no artifacts of any kind. Considerable dirt had accumulated outside of the house, and excavation here produced many refuse sherds. On the south and west sides a low enclosure wall about 30 centimeters wide leaves a passage some 78 to 82 centimeters wide along the side of the house. An entrance through this wall is on the center of the west side. This passage between the enclosure and house wall was filled with dirt and sherds, and next to the southwest corner of the house was an intrusive burial. This was a direct burial in an unprepared grave (Site 6H-2A), and while doubtless somewhat later than the fill, the material is not very distinctive. Three vessels accompanied the burial. For comparison with other sites in the area

the refuse material from this site can be treated as a unit and described in terms of wares.

#### MATERIALS FROM THE GRAVE AT HOUSE 1 (SITE 6H-2A)

The three clay vessels which accompanied the burial consist of a pair of small redware double-spout vessels with rounded bridges (Fig. 4a) and a double whistling jar. The containers of the double-spout vessels measure 6 centimeters high by 5 centimeters in diameter, and the spouts are slightly tapering. The double jar, half of which was badly broken, is decorated in a two-color (black-on-orange) negative design of rows of lines and dots (Fig. 4b). One half is a plain black container with a tapering spout. This is connected by a large flat bridge, and a smaller round one, to a modeled seated figure.

#### REFUSE MATERIAL FROM HOUSE 1 (SITE 6H-2)

##### Plainware

Orangeware, 212 fragments. All plainware fragments are orange, and include the following varieties:

27 Thick orange fragments from ollas with flare-rims and globular bodies. No handles are found.

112 Thin orange fragments of which 95 are body pieces, nine are from flat bases of rounded-sided vessels, seven are from straight-rimmed vessels suggesting goblets, and one is from a constricted bulge-collar vessel

35 Pieces of shallow plates with annular bases (Fig. 4f)

14 Pieces of crude orange toy vessels

22 Pieces of shallow orange plates pierced with sieve-like holes. One is complete and measures 5.5 centimeters in diameter.

1 Piece appears to be the base of a conical handle

1 Thick orange piece has a relief face

##### Polished Monochrome Wares

Blackware, 32 fragments. This is well-fired, polished blackware including several fragments from the same vessels. The pressed-relief design is interesting as a possible diagnostic.

5 Pieces of one double-spout vessel with a zoomorphic face engraved with broad grooves (Fig. 4i)

5 Pieces of a plain double-spout vessel

12 Pieces of other double-spout vessels, including three spouts, a round bridge, and a ball whistle

8 Pieces with pressed design, including a bird and a figure holding a spear-thrower and darts (Fig. 4h, k)

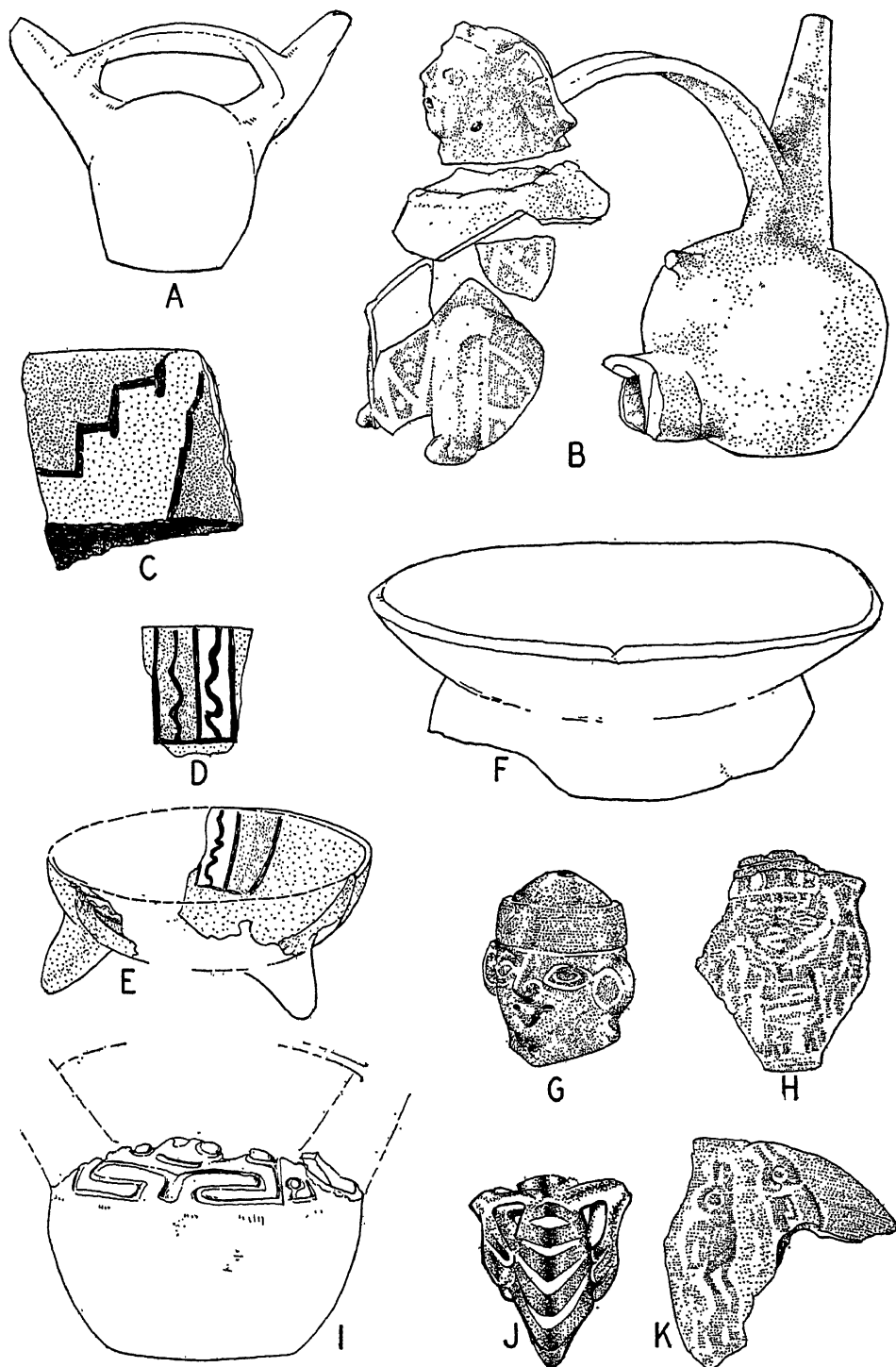


FIG. 4. Ceramic styles from above-ground house site, Wilkawain.

2 Modeled pieces, one of two hands holding a shell; the other a human head with seven pierced holes (Fig. 4g, j)

Redware, a fragment of a taper spout. Other pieces of polished redware are parts of painted vessels. Polished redware is common in other sites of the region and its absence here is surprising.

#### Negativewares

No negative-painted piece, either two- or three-color, is found in the sherd collection. The piece in the intrusive grave has already been mentioned.

#### Tiahuanacoid Wares

Thick black, white-on-redware, 118 fragments. All of these pieces come from open straight-sided bowls with plain straight rims, and flat bases (Fig. 4c). These thick U-shaped bowls have been found associated with Coast Tiahuanaco style at a number of sites, notably Pacheco. Only 27 of these fragments have painted design and none is definitely Tiahuanacoid. Four are simple step designs in black outline filled with white; two have black circles filled with white; and 21 are band or linear designs. The division is as follows:

- 23 Straight-rim pieces; 11 plain and 12 painted
- 73 Body fragments; 58 plain and 15 painted
- 22 Plain heavy flat base pieces

Polychrome tripods, 24 fragments. These pieces probably come from about five vessels. All are shallow plates with simple short conical tripod legs (Fig. 4d, e). The design on the inside consists of alternating perpendicular and wavy lines in black, yellow, gray-on-red, or black, gray-on-red. The identification as Tiahuanacoid is tentative.

Modeledwares, 20 fragments. Modeled pumas with painted design are fairly characteristic of some Tiahuanacoid collections and thus are included here. The 20 pieces can be described as follows:

1 Piece of a modeled puma head with black, white-on-red design

19 Pieces of one double-bowl, one half red, the other painted in black, white-on-orange and modeled as a jaguar or puma. Pieces of the spotted body, feet, ears, and eyes are included.

#### Miscellaneous Paintedwares

Forty-one pieces are grouped together and can best be described in tabular form:

7 Fragments of black-on-orange flat-handled spoons

4 Pieces of one small open-bowl with flare-rim and two body nubbins, painted in purple-on-orange

1 Fragment of small open-bowl with flare-rim, black-on-brown

2 Fragments of black-on-orange taper spouts with flat bridges

1 Fragment of white-on-orange taper spout with flat bridge

4 Pieces of one black, white-on-red constricted-collar vase with flare-rim and triangle and hook design

11 Pieces of one black, white-on-orange constricted bulge-collar vessel with band and circle design

11 Miscellaneous fragments of spouts and bridges

#### Copper Fragments

The only metal fragments were the pierced flat head of a pin and the stem of another.

#### Stone Artifacts

A rectangular small flat stone, pierced as if for a pendant, was the only piece found.

A tabular résumé of the refuse material follows, first for suggestions of shapes of vessels and then for type painting.

	No.	Per Cent
Olla . . . . .	28	6.25
Double-spout . . . . .	22	4.91
Double-bowls . . . . .	19	4.24
Spouted vessels . . . . .	15	3.35
Constricted flare-collar . . . . .	4	.89
Constricted bulge-collar . . . . .	12	2.68
U-shaped thick bowl . . . . .	118	26.34
Pedestal plates . . . . .	35	7.81
Bowls with flare-rims. . . . .	5	1.12
Sieves . . . . .	22	4.91
Toys. . . . .	14	3.12
Modeled vessels . . . . .	3	.67
Goblet shapes (?) . . . . .	7	1.56
Tripod plates . . . . .	24	5.36
Spoons . . . . .	7	1.56
Conical handle (?) . . . . .	1	.23
Shape undetermined . . . . .	112	25.00
Totals . . . . .	448	100.00

	No.	Per Cent	Totals	Per Cent
Plain orangeware . . . . .			212	47.32
Orange vessels . . . . .	176	39.29		
Sieves . . . . .	22	4.91		
Toys . . . . .	14	3.12		
Monochrome polished . . . . .			33	7.37
Blackware . . . . .	32	7.14		
Redware . . . . .	1	0.23		
Paintedwares . . . . .			203	45.31
One-color . . . . .	26	5.80		
(Black-on-orange, 9) . . . . .		(2.01)		
(Purple-on-orange, 4) . . . . .		(0.89)		
(Black-on-brown, 1) . . . . .		(0.22)		
(Miscellaneous, 12) . . . . .		(2.68)		
Two-color . . . . .	167	37.28		
(Thick black, white-on-red, 118) . . . . .		(26.34)		
(Black, white-on-red, 5) . . . . .		(1.12)		
(Black, white-on-orange, 30) . . . . .		(6.70)		
(Black, gray-on-red, 14) . . . . .		(3.12)		
Three-color . . . . .	10	(2.23)		
(Black, yellow, gray-on-red, 10) . . . . .		(2.23)		
Totals . . . . .	448		448	100.00

Further analysis of this site is reserved for a later section in order to make use of comparative materials. The slight suggestion of stratigraphy in the intrusive grave cannot be stressed because of its small content. It is interesting to note that the grave contained both redware and two-color negative, neither of which appears in the refuse collection.

#### C. DEEP STONE-LINED TOMBS

Some 6 meters in front, or roughly south, of the temple of Ichik-Wilkawain is a terrace wall. Immediately in front of this terrace, cover-slabs of four stone-lined tombs (Sites 7H-1, 2, 3, 4) were exposed on the surface. In construction the four tombs form but two units, as the following description of the paired graves (7H-1 and 7H-3) will show (Fig. 5; Pl. 1c, d).

The two tombs in the set are rectangular and parallel to each other, separated by a common central wall, some 75 centimeters thick, which also serves to support the covering stones. Both tombs are 1.12 meters wide, although 7H-1 is 3.55 meters long and 7H-3 only 3.32. Due to a slight rise in the ground surface one is about 2.5 meters deep and the other 2.6. The walls are lined with large and small stones set in clay cement. Each tomb is covered with four

large stone slabs. The floor is hard-packed clay. Most of the artifacts were found within 20 centimeters of the floor in spite of the fact that a fill of dirt and stones extended almost to the covering slabs. Since the stone-lined walls and the covering slabs were in undisturbed condition, it is obvious that this dirt and large stone fill was intentional, not accidental. No bones were found, probably because of the heavy water seepage in the tombs. Traces of ash were found on the tomb floor.

A few complete vessels were encountered. Most, however, were badly broken, and the pieces of a single vessel were scattered over the full length of the floor, rather than in one place. This suggests that the pottery was perhaps thrown in from the top and thus broken, or shattered by the stones of the fill as they were thrown in. While many vessels have been restored, it is none the less clear that fragments of previously broken vessels also found their way into the grave. This is particularly noticeable in the polished blackware pieces which are easily isolated and is also true of modeled puma vessels, none of which has proved restorable. Thus the ceramic collection presents difficulties of description and analysis, since it can be treated neither as pure grave material nor as

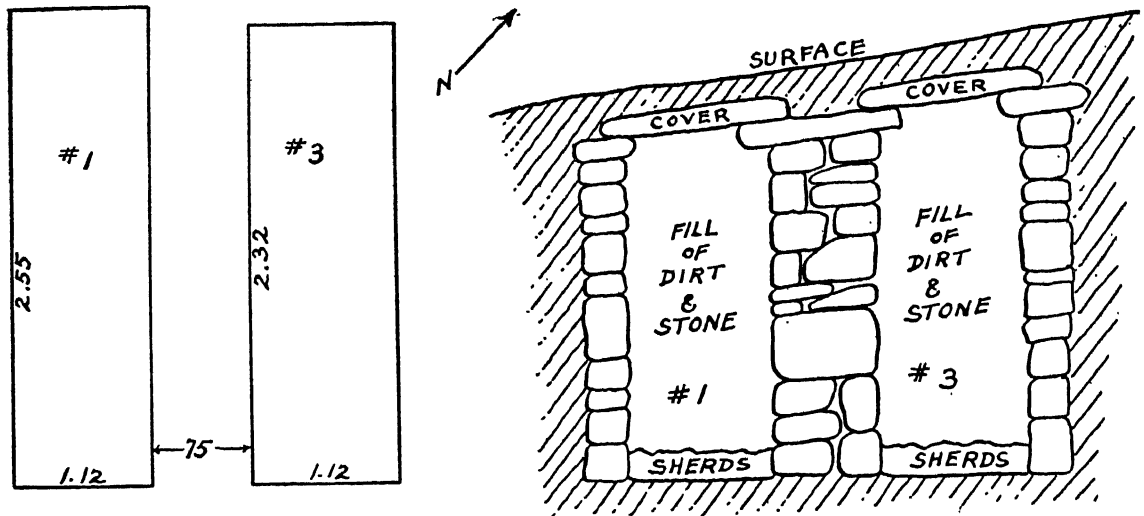


FIG. 5. Groundplan and cross-section of deep stone-lined tombs, Wilkawain.

refuse. A grouping by outstanding wares is again followed, by which means both complete vessels and sherd material can be described at once.

The first pair of graves, 7H-1 and 3, was by far the richest in material, and forms a unit on typological grounds. The materials from the other pair, while presenting somewhat similar styles, were relatively poor and far more fragmentary. There is no sound basis, however, for distinguishing one set of graves from the other, and consequently the collection will be described as a whole. Whether the graves should be associated with the temples is unanswerable in definite terms. The location in front of the temple of Ichik-Wilkawain and the general nature of the stonework suggest a relationship, but this is by no means certain. Search was made for other deep graves of this type, but without success.

#### MATERIALS FROM DEEP STONE-LINED TOMBS

##### Plainware

Orangeware, 2 complete, 1053 fragments. Plain orange pieces were common in all four tombs. Most of these are from ollas, although reconstruction of vessels is difficult. An estimate of the possible number of vessels represented is impossible at this time. The orangeware is somewhat crude and crumbly. Some of the fragments have been burnt black by use.

One thousand twenty-nine fragments of ollas. The commonest shape is a globular olla with flare-rim and two horizontal flat-loop handles. Forty-six handle pieces were found. Other olla shapes are represented, including a plain vertical rim; a flare-rim with bulge below; and a thicker rim of an open olla with slightly constricted mouth. Pieces of large vessels with constricted straight high collars are included here. Most fragments are of medium thickness, but 29 are extra thick.

- 5 Pieces of shallow plates with annular bases
- 5 Pieces of straight-sided goblets, and one complete goblet with a raised band (Fig. 7e)
- 2 Fragments of flare-collars with faces, one in relief, the other incised
- 2 Incised fragments
- 1 Fragment of a spout-and-bridge vessel
- 9 Pieces of sieves, and one complete sieve, measuring 8.3 centimeters in diameter and 1 centimeter deep (Fig. 11f)

Brownware, 94 fragments. The olla fragments included here might well be placed with the orangewares. Fragments from other vessels, however, show a better finish and a distinct brown color.

- 13 Pieces of one flare-rim, globular-bodied olla
- 48 Pieces of large vessels with constricted high collar
- 14 Pieces of two shallow plates
- 8 Pieces of a flask-shaped vessel of thick ware

- 7 Pieces of one vessel with relief legs
- 2 Pieces from goblets with raised bands
- 2 Pieces of modeled faces

Whiteware, 6 fragments.

### Polished Monochrome Wares

Blackware, 14 complete, 134 fragments. Polished blackware occurs in all four tombs, although most of it was found in Sites 7H-1 and 7H-3, and is usually well polished, thin, and well fired. While some of the shapes are suggestive of the Late Chimú style, a number of features distinguish it. Most of the double-spouts have round bridges; no pressed-relief design is represented; no stipple design is found. Likewise, except for two simple incised crosses, incision is not used. The shapes and designs of blackware distinguish it completely from the Chavín style. The following descriptive list indicates the variety.

5 Complete shallow plates. Three are from 1.5 to 2 centimeters deep and from 6.5 to 7.5 centimeters in diameter and without decoration (Fig. 6h). Two are slightly deeper plates, about 2.5 centimeters deep, and 12 centimeters in diameter.

12 Fragments of one open-bowl with rounded base and an incised cross on the side

5 Pieces of an open-cup with small vertical loop handle

1 Complete goblet with straight, slightly diverging sides and a raised band below the plain rim. It is 9 centimeters high, 9 centimeters in diameter at the rim, and 7 centimeters at the base.

5 Fragments of similar goblets (Fig. 6c)

1 Complete goblet without a raised band and with slightly bulging sides is 9 centimeters high, 8 centimeters at the rim, and 5.5 at the base (Fig. 6d; Pl. 2b).

1 Complete angular-bodied bowl with slightly constricted mouth and no rim. It measures 8.5 centimeters high, 9 centimeters wide, and 4 centimeters at the mouth.

2 Fragments of similar vessels (Fig. 6b)

1 Complete angular-bodied vase with constricted tapering collar with a vertical loop handle at the base of the collar (Fig. 6e). It measures 9.5 centimeters high, 9.5 centimeters diameter at the body angle, has a flat base and a taper collar 4 centimeters high.

8 Fragments of a similar vase

10 Fragments of one globular-bodied vase with constricted bulge-collar and a loop handle at the collar base

1 Fragment of a vase with constricted flare-collar

3 Fragments of one vessel with globular body and slightly flaring collar (Fig. 6a)

3 Complete double-spout bowls of small size (Fig. 6i). The bodies are round, and the largest is 9 centimeters in diameter and 6.5 centimeters high. The short spouts (4 to 5 centimeters long) have a raised ridge around their bases and are connected by a round bridge.

8 Pieces of one similar vessel with a simple relief design on the upper part of the body, and two spouts with rounded bridge

12 Fragments of similar double-spout bowls with round bridges

1 Complete double-spout vessel representing a curved animal with two heads (Pl. 2c). The tapering spouts are connected by a flat bridge. The animal base is about 5 centimeters wide and thick and is modeled in a curve so that the total length is 17 centimeters.

1 Complete double-bowl with two simple globular containers. One has a taper spout connected by a flat bridge to the modeled bird whistle on the top of the other (Fig. 6g).

9 Pieces represent modeled vessels. Two are modeled animal legs, 3 relief legs, 3 animal heads, and one a face lug.

59 Miscellaneous body and base fragments

Redware, 4 complete, 460 fragments. Monochrome redware pieces occur in sufficient quantity to constitute a definite type in the grave collections. Most of the ware is covered completely with a red slip or paint. While many of the painted pieces have a solid red base, here the red coloring is the only decoration. In review, only two shapes are represented with any frequency: a constricted high collar jar and a shallow plate. Incised or appliqué decoration is absent, and modeling is present in only one piece. A résumé list of the redware follows:

1 Complete modeled monkey standing on four legs with head twisted to one side and tail curled up (Fig. 7a). A short, cylindrical-collar spout projects from the back of the animal.

2 Complete constricted-collar jars with flat bases and globular bodies (Fig. 7d). One is 12 centimeters in diameter and 9 centimeters high for the body, with a straight collar 5 centimeters high and 7 centimeters in diameter. The other is slightly larger, with a slight flare to the collar.

382 Fragments of similar constricted-collar jars. Straight, slightly flared and bulge-collars are represented. Globular bodies and flat bases are the rule, although one slightly angular body fragment was found. A few flat-loop vertical body handles suggest



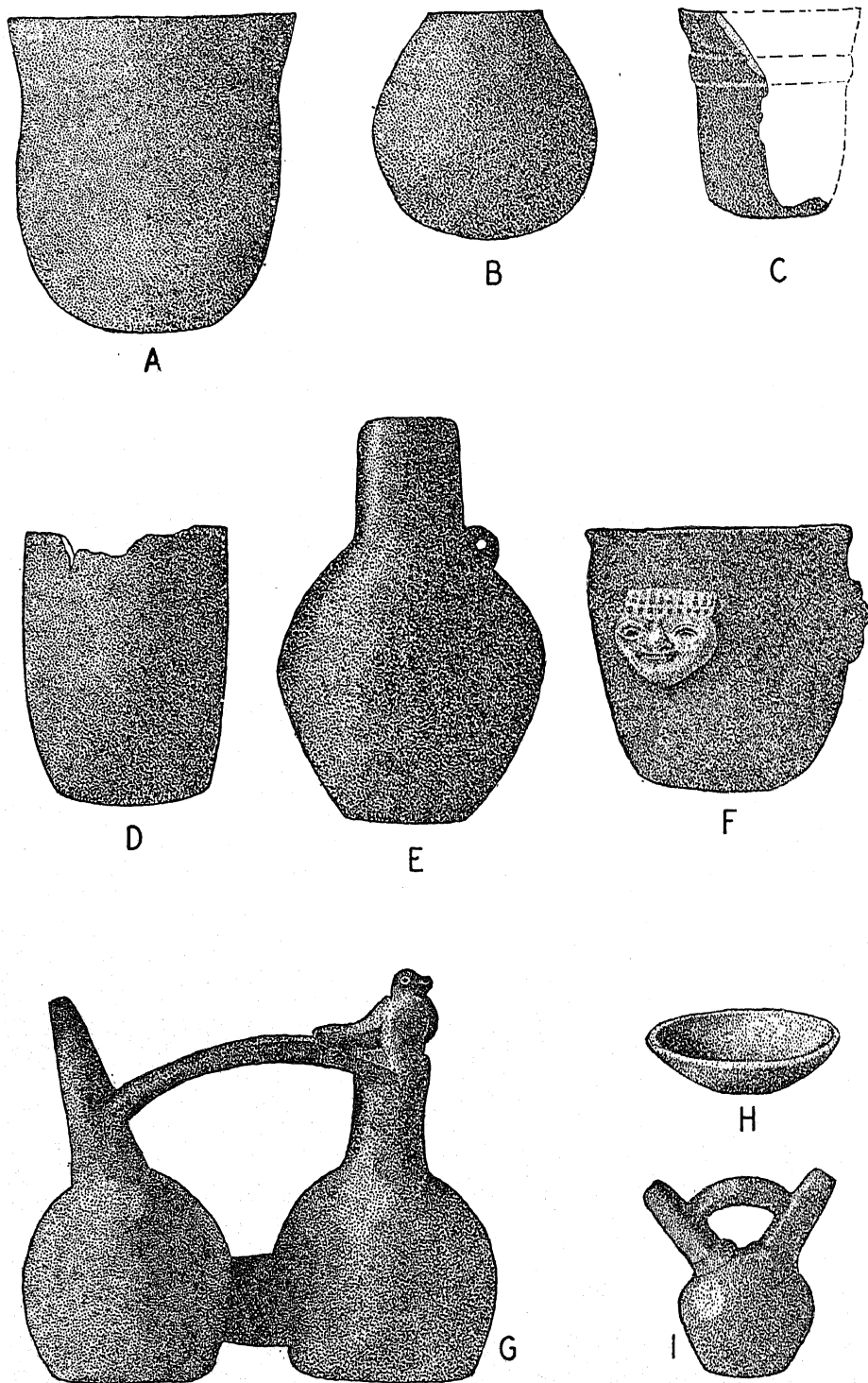


FIG. 6. Blackware style of deep stone-lined tombs, Wilkawain.

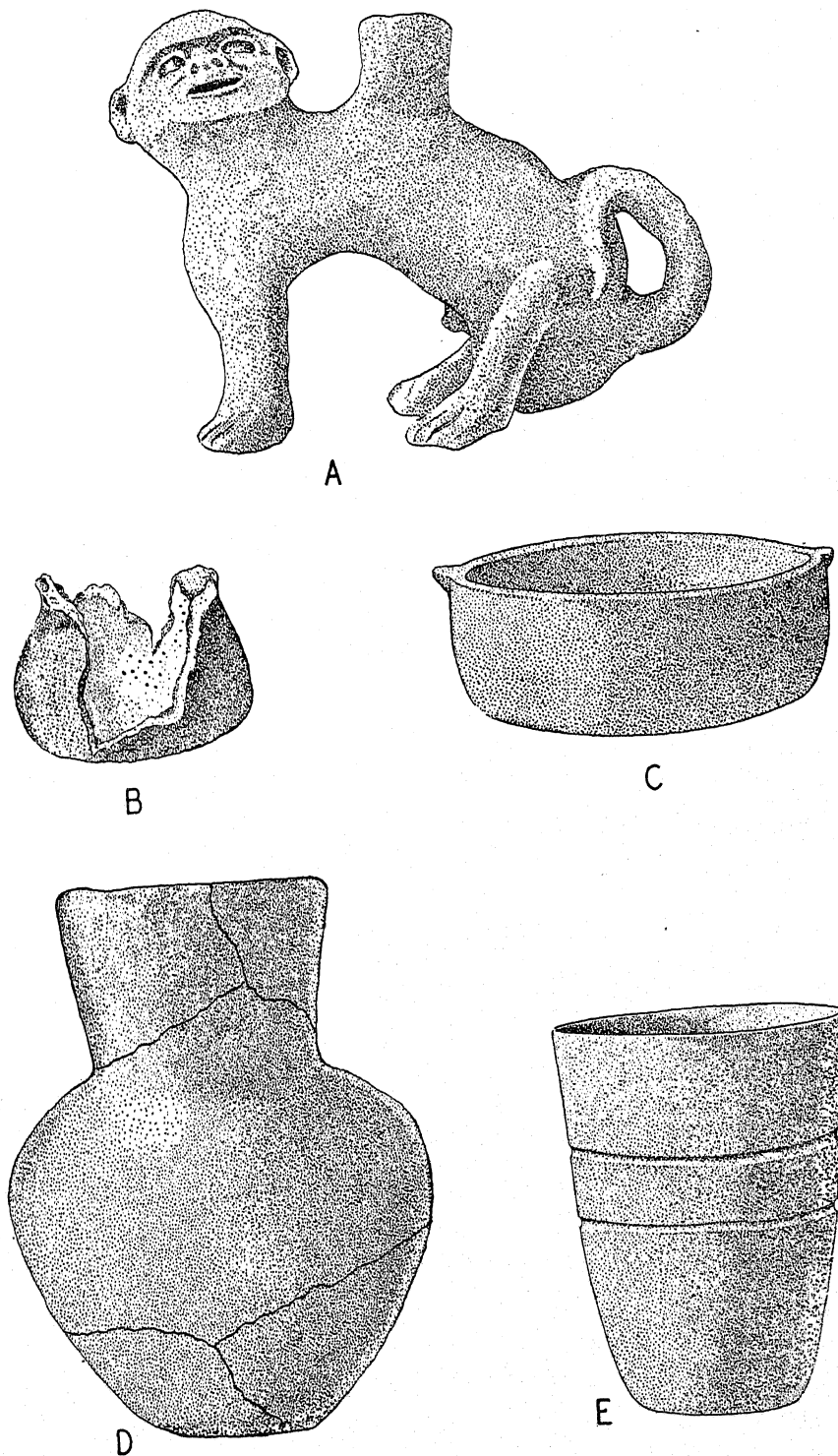


FIG. 7. Redware style of deep stone-lined tombs, Wilkawain.

this as a variant feature. Also one has a lug at the base of the collar. While most fragments seem to represent vessels about the size of those described above, some 47 pieces come from similar, but larger jars.

25 Pieces of four shallow plates, one of which has a groove around the rim edge

1 Complete vertical-sided, flat-based open-bowl with a plain rim (Fig. 7c). The rim diameter is 12.5 centimeters and the height 4 centimeters. Two small rim lugs project on either side.

1 Piece of a deep open-bowl with slightly convex sides

3 Pieces possibly from goblets

22 Globular flare-rim olla fragments with one horizontal flat-loop handle

6 Base fragments of a bowl with convex body and perhaps a wide flare-rim (Fig. 7b)

21 Miscellaneous fragments

### Negativeware

Two-color negativeware, 2 complete, 207 fragments. Only two-color negativeware is found and largely in one tomb, 7H-1, although a few fragments occur in each of the others. The negative design is commonly superimposed on a red base, and rarely on an orange base. With the exception of the two complete plates, designs are simple lines, wavy lines, and dots. Neither in shapes nor designs, nor in the addition of a third color, does this negativeware resemble the classic Recuay. In its simplicity this ware is somewhat like the Gallinazo style, but the shapes are distinct. Actually only two vessel shapes have negative design: a flat plate and a constricted-collar jar.

2 Complete plates identical in size and design (Fig. 8). They are 26.5 centimeters in diameter and 6 centimeters deep, with a curved bottom. The base is red and the design on the inside only. The design in negative consists of a double circle in the center containing a cross. Between the central circle and the rim are three repeated design units composed of an angular scroll flanked on both sides by a step and scroll. A series of tabs mark the rim design.

207 Fragments of constricted high collar jars (Fig. 11e). Three such jars can probably be reconstructed from the 163 fragments of Tomb 7H-1; the remaining fragments from other tombs seem to be from the same type vessels. All are globular-bodied vessels with straight or slightly flaring, constricted high collars. One has a horizontal handle on the body and an oval lug. The design is limited to the collar, the body of the vessel being black. The collar designs are simple series of alternating vertical lines, wavy lines and dots.

### Tiahuanacoid Wares

A number of pieces can be tentatively identified by shape, modeling, and design as related to the Middle period Tiahuanacoid styles of the Coast of Peru. Included here are five complete vessels and 113 fragments. Tripods are found

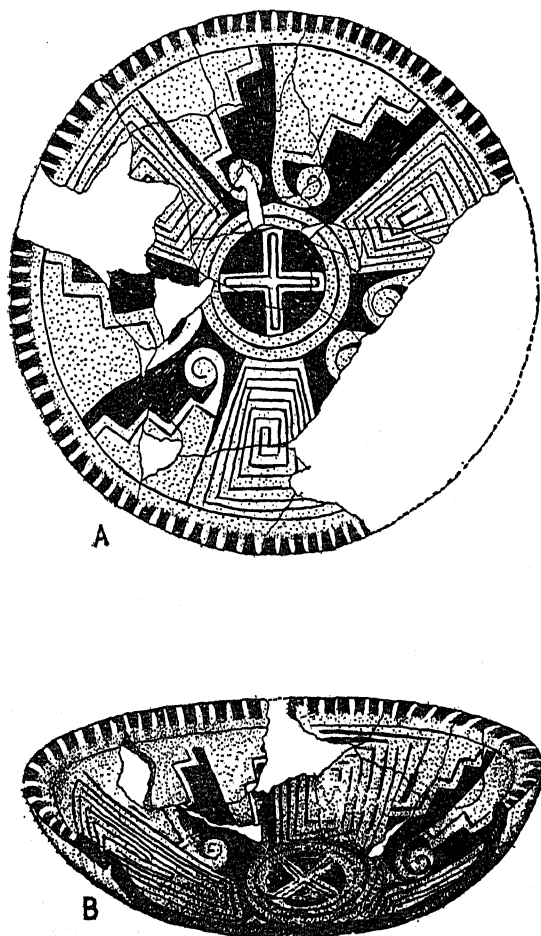


FIG. 8. Negativeware plate from deep stone-lined tombs, Wilkawain.

in the tombs, but none is decorated in a Tiahuanacoid style. It is difficult to identify this material as any specific style of Tiahuanacoid ware now known. In total the comparisons must be with the Peruvian Coast styles rather than the Bolivian Tiahuanaco. In the closing résumé of the tomb contents, an attempt will be made to analyze this style in more detail.

Thick black, white-on-redware, 32 fragments. All of these pieces may represent one vessel with a globular body, two horizontal loop body

handles, and a constricted face-collar with flare-rim. Seven pieces of the collar show a face with relief features and a band beneath each eye, all painted in black, white-on-red, and of thick clay. The other pieces are also thick and painted in the same colors. The design consists of vertical and wavy lines plus bands. While thick ware, it is not from the same type of vessel as that described for the house site, 6H-2.

Modeled wares, 31 fragments. All the modeled pieces are from puma vessels painted in black, white-on-red. None of these is complete, but the general shape is probably a four-footed puma vessel with constricted collar, curled tail, and modeled head. Fifteen modeled feet (Figs. 9c, 10c) were found and one pair of joined feet in relief. Sections of the curled tails, constricted collars, and modeled heads were also found.

Painted wares, 5 complete, 50 fragments. With one exception, all these pieces are painted in two or three colors on a red or orange base. The colors are common in Tiahuanacoid styles, including black, white, yellow, gray, and brown, plus the orange and red base color. The designs are composed of elements suggestive of the Tiahuanacoid styles, such as chevrons, puma heads, S-curves, pumas, and the like. The shapes are less typical, but not exceptional for the style.

1 Complete face-collar jar with elongated globular body, a flat base, and one vertical loop body handle (Fig. 9d). The face is modeled on the collar with some skill, has vertical lines on each cheek, and a band above the eyebrows. The rim is missing, but probably had a flare. The painted design in black, gray-on-red is repeated on the front and back of the upper half of the jar. It consists of a horizontal S-band with a stylized puma head at each end. The vessel is 27 centimeters in diameter and 22 centimeters high, including the 7-centimeter collar.

1 Fragment of a face-collar vessel with a flare collar and a face with modeled nose and incised features. It is painted in black, gray-on-orange, with vertical lines beneath the eyes, and an irregular design above the eyebrows (Fig. 9b). A flat handle is at the back of the collar.

1 Restorable constricted straight-collar jar with a globular body, 15 centimeters in diameter, and a round body lug (Fig. 10d). It is painted in black, red-on-orange on the front and back of the upper half of the body. The design consists of a horizontal, outlined S-curve with two red-filled dots at each point of the S.

13 Fragments of a similar straight-collar jar, designed in black, white-on-orange

1 Complete flask-shaped vessel with a constricted and slightly flaring collar (Fig. 10e). The flask is 16 centimeters in diameter, 3.4 thick at the flat edge, and 8.5 centimeters thick in the center. The collar is 5.5 centimeters high and 3.7 thick at the rim. It is painted in black, white-on-red in a simple design which quarters the face of the flask.

1 Complete angular-bodied vessel with constricted neck and flare-rim. A design in black, white, yellow-on-red consists of a double circle with seven hook appendages ending in circles (Fig. 10b).

9 Fragments of a similar vessel have a horizontal S-design painted in black, gray, yellow-on-red

5 Fragments of another angular-bodied vessel have a cross-hatch design in black, white-on-red

1 Restorable double-spout vessel has a muffin-shaped container and two short straight spouts connected by a round bridge (Fig. 10a). The body is 8.5 centimeters in diameter and 7 centimeters high, and the spouts are 4.5 centimeters long. A faint cursive design in black-on-red is still visible.

3 Fragments of an open straight-sided bowl of common Tiahuanacoid shape have a triangular design in black, white, brown-on-gray

19 Pieces from one vessel are painted in black, white, gray-on-red in a faded design like a stylized puma

#### Miscellaneous Paintedwares

The remaining 140 painted fragments cannot at the moment be grouped with any of the previously mentioned wares. These are listed below for completeness.

2 Fragments with painted orange design

49 Black-on-red fragments. Five are from one high constricted-collar vessel with chevrons around the rim edge. One is from a similar vessel with broken wavy lines around the rim edge. The rest have linear designs.

14 Black-on-orange fragments. Five are from shallow plates with conical tripod legs. These tripods are all from Tomb 7H-2, the other tombs having none.

13 Red-on-orange fragments. Twelve are from shallow plates, and one is a relief face.

3 Orange-on-gray fragments

3 White-on-red fragments. One represents a round handle, and two are fragments with chevron designs. These are not typical of the so-called white-on-red style.

4 Brown-on-white fragments from shallow plates

3 Black, white-on-red fragments

10 Black, red-on-orange fragments. One is a piece of a modeled animal, the others seem to be from one round-bodied vessel with a wide flare-rim.

38 Black, red-on-whiteware fragments from shallow plates

1 Black, white, red-on-orange fragment of a modeled collar

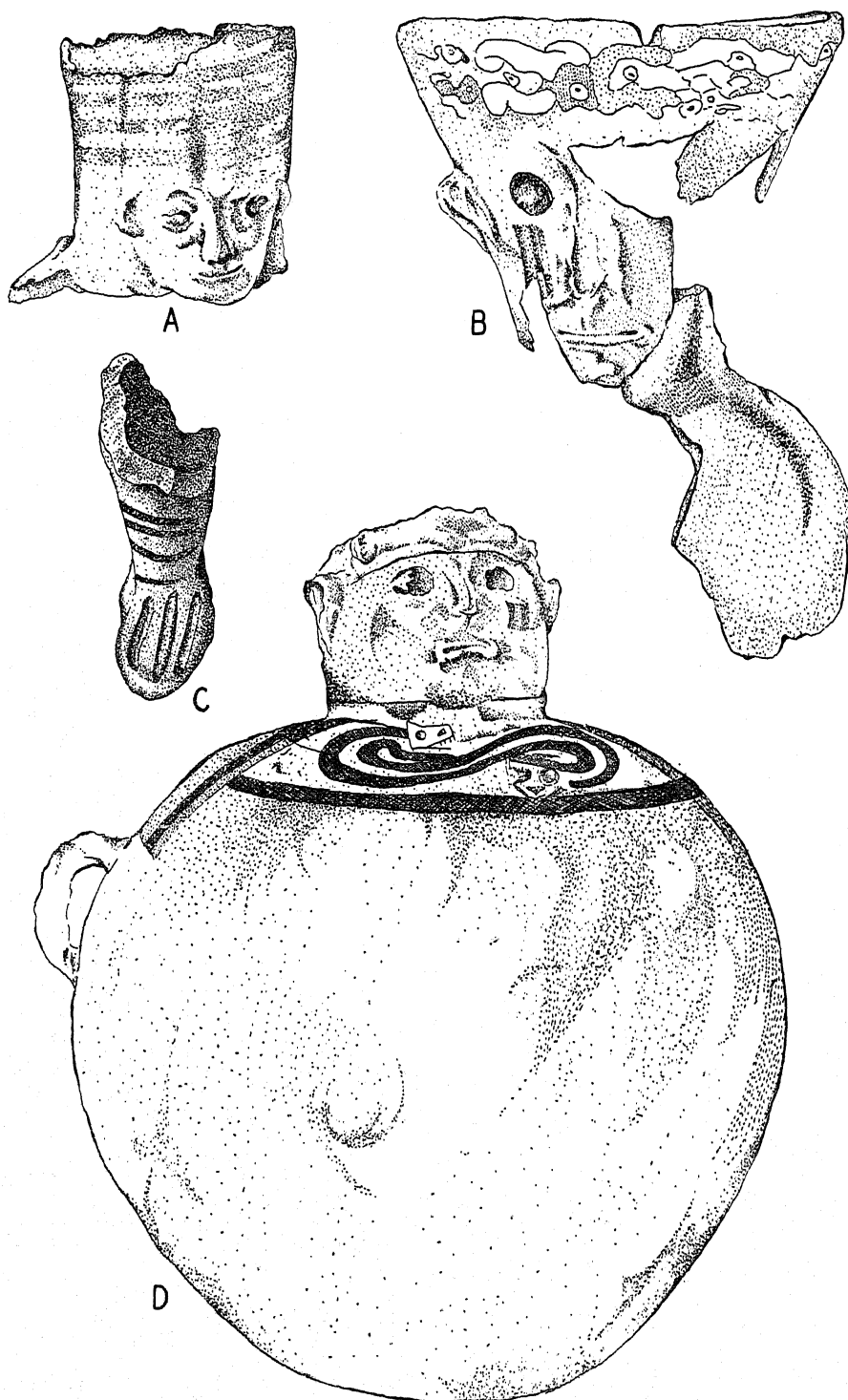


FIG. 9. Tiahuanaco style of deep stone-lined tombs, Wilkawain.

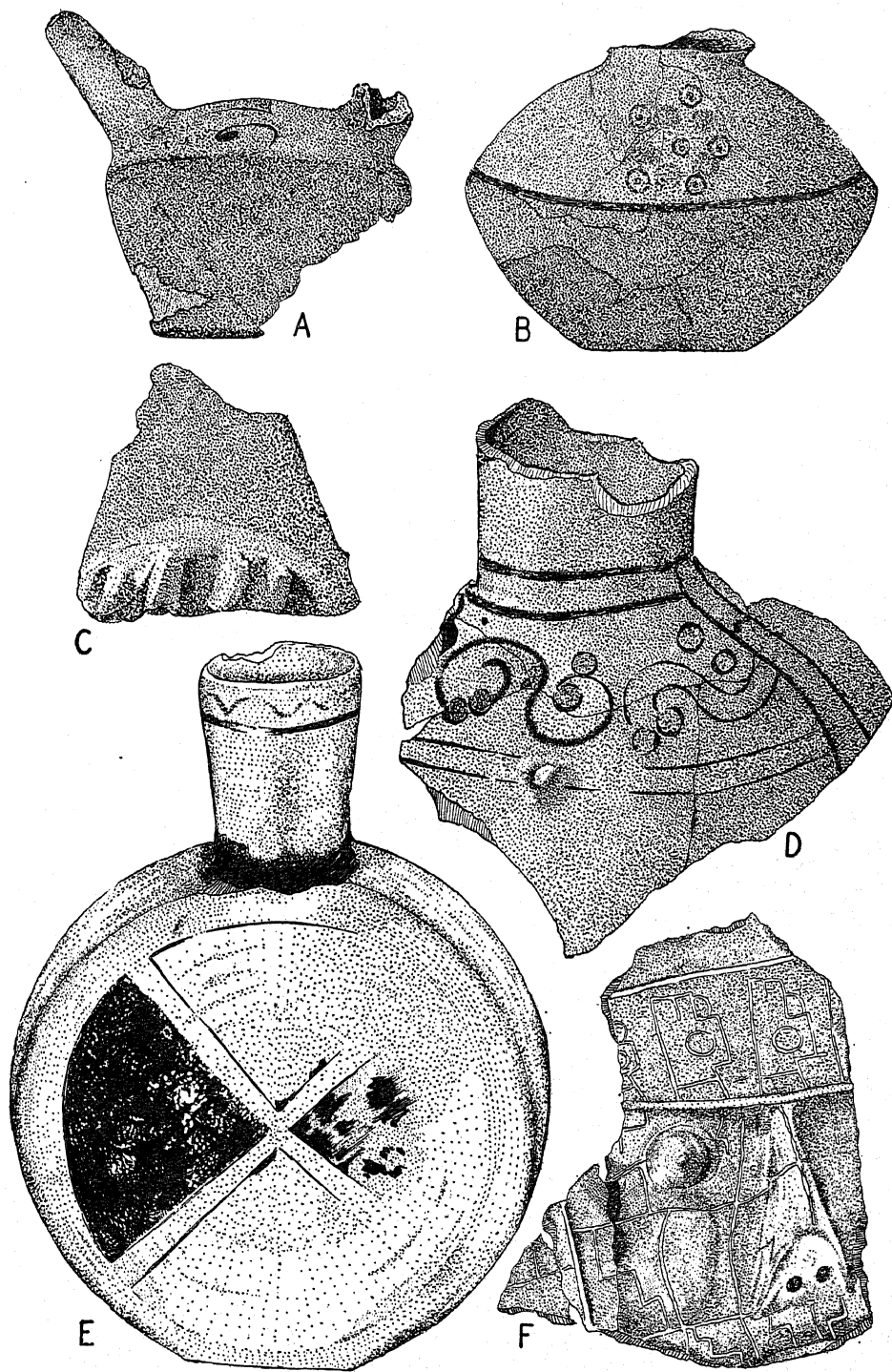


FIG. 10. Tiahuanaco style of deep stone-lined tombs, Wilkawain.

## Clay Spoons

Four complete clay spoons and one handle were found in Tomb 7H-1. All are slightly different in shape and in painted designs. They are described here for comparative purposes:

1 Spoon with an oval bowl and flat handle is orange on the outside and painted with black and white longitudinal designs on the inside of the bowl

1 Spoon has a round bowl and straight flat handle. It is of whiteware with red, wavy lines on the inside of the bowl (Fig. 11c).

1 Spoon has an elongated bowl with a flat loop handle. It is orange outside and has black and white lines across the bowl.

1 Spoon has a round bowl and a long straight handle. It is of whiteware, and the inside of the bowl is painted in light brown and a reddish color in a curvilinear style. It is a style distinct from anything else found in the tomb.

1 Spoon handle is flat with a nubbin at the end and has black and gray cross stripes on the orange clay.

## Toy Vessels

Twenty-five small clay vessels were found in the tombs. In spite of the variety of shapes these are described as a group under the label of toys.

4 Toy plates, one orange and three red-on-orange

2 Toy tripod plates, both orange

1 Toy bowl with annular base and orange color

2 Handleless toy ollas, both red-on-orange

2 Toy ollas with one handle, one orange, one red-on-orange

11 Toy ollas with two handles, eight orange, one red, one black, and one red-on-orange

1 Toy orangeware bowl with lip on one side

1 Toy blackware bowl with animal-face collar

1 Toy spoon of red color

## Metal Artifacts

Four pieces of copper were found in Tomb 7H-3. Two long copper pins with cut-out animal heads are 21.7 centimeters in length (Fig. 11a). The decorated animal head is 4 by 2.5 centimeters. A flat-headed copper pin, 5 centimeters long, and a pin with a flat nail-top head, 3 centimeters long, are the other two pieces. A narrow wooden point, 5 centimeters long, overlaid with thin gold leaf, was found in the first tomb.

## Stone Artifacts

Twelve stone artifacts can be described briefly.

3 Chipped flint spearpoints (Fig. 11b), the complete one measures 5 centimeters in length and is 2.6 centimeters wide. The others are broken.

4 Chipped obsidian spearpoints (Fig. 11d). One is 5 by 2.6 centimeters; another 6 by 2.7 centimeters; the others are broken.

2 Plain hammerstones

1 Ring stone

1 Waterworn stone

1 Small red stone bead

## OBSERVATIONS ON THE DEEP-TOMB CERAMICS

As previously mentioned, although minor differences do exist, the four tombs are treated here as a unit. In any case, in either Tomb 7H-1 or 7H-3 the association of several styles is shown. The position of the pottery on the floor of the tomb, covered by about 2.5 meters of fill capped by large cover-slabs, makes the association of these styles unquestionable. This is important since the combination is one as yet unreported from any other Peruvian site. A brief résumé indicates the styles and types which must be considered contemporaneous in reference to this site.

1. Polished blackware of good quality is well represented by fourteen complete vessels and 134 fragments which indicate at least 18 more vessels. The shapes are principally shallow plates, containers with double-spouts and round bridges, goblets with raised bands, constricted-collar jars with taper or slightly bulge-collars, and fragments of modeled animals. To these can be added a double-bowl with whistling bird and a curved double-headed animal with double-spout and flat bridge. While the shapes are suggestive of coastal blackware affiliations, the absence of pressed relief or stipple design is distinctive.

2. Polished redware forms a definite style in the tombs and is represented by four complete vessels and 460 fragments indicating at least 17 more vessels. The most typical shape is a constricted-collar jar, with either a straight or a slightly flaring collar. Shallow plates, ollas, a vertical-sided open-bowl, and a modeled monkey are other shapes. With the exception of modeling in one piece, these vessels

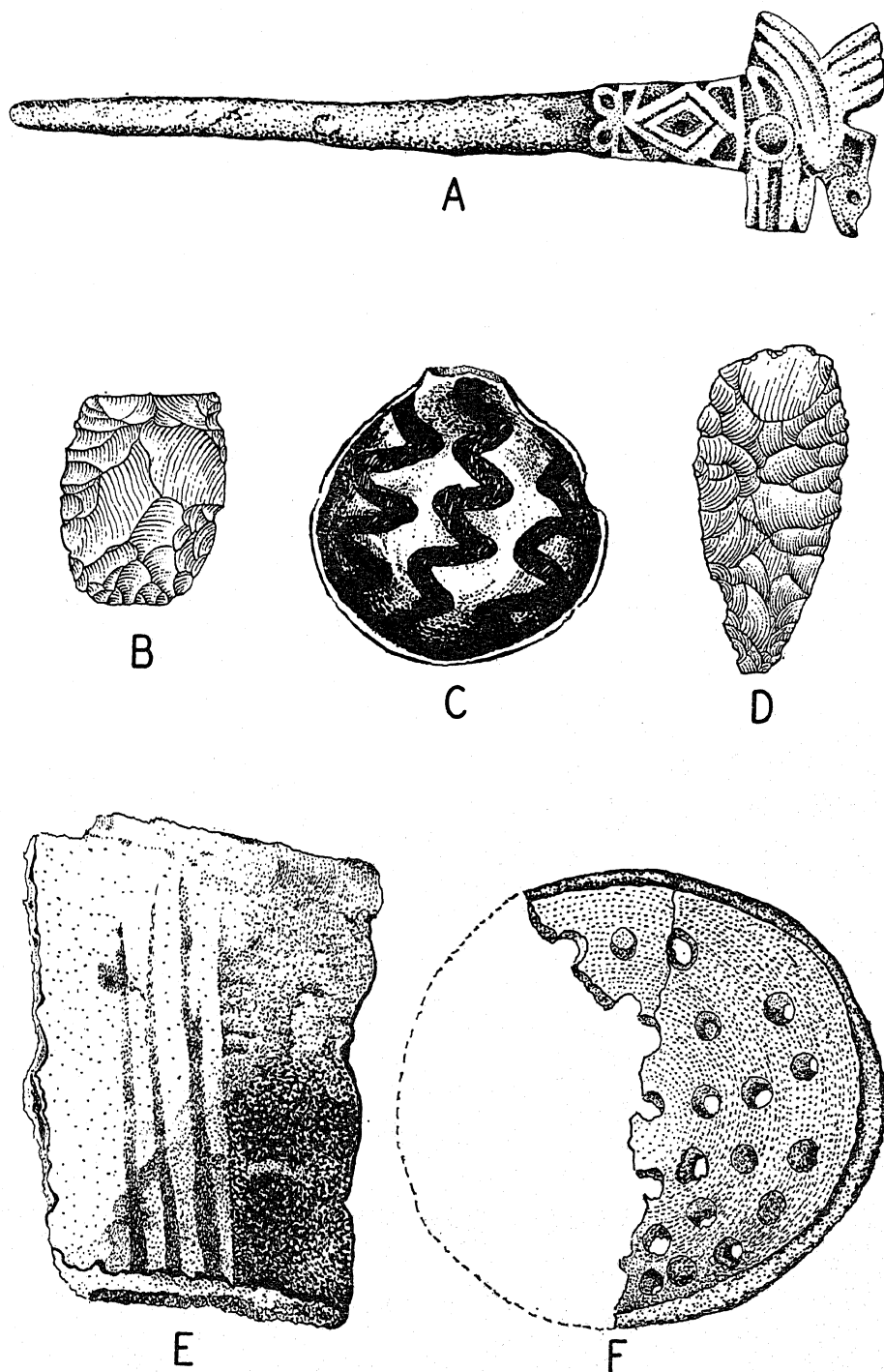


FIG. 11. Miscellaneous artifacts from deep stone-lined tombs, Wilkawain.



## RÉSUMÉ OF DEEP-TOMB CERAMICS IN TERMS OF COLORS

	Frag- ments	Per Cent	Com- plete	Spoons
Plainwares . . . . .	1153	55.22 (47.69)	2	
Orangeware, 1053, 2 complete . . . . .		(4.26)		
Brownware, 94 . . . . .		(.27)		
Whiteware, 6 . . . . .				
Polished monochrome wares . . . . .	594	26.90 (6.07)	18	
Blackware, 134, 14 complete . . . . .		(20.83)		
Redware, 460, 4 complete . . . . .				
Negative paintedwares . . . . .	207	9.38	2	
Positive paintedwares . . . . .	254	11.50 (.09)	5	4
Orange painted, 2 . . . . .		(3.89)		
One-color, 86, 1 complete, 1 spoon . . . . .				
(Black-on-red, 49, 1 complete) . . . . .				
(Black-on-orange, 14) . . . . .				
(Red-on-orange, 13) . . . . .				
(Orange-on-gray, 3) . . . . .				
(White-on-red, 3) . . . . .				
(Brown-on-white, 4) . . . . .				
(Red-on-white, 1 spoon) . . . . .				
Two-color, 134, 3 complete, 2 spoons . . . . .		(6.07)		
(Black, white-on-red, 71, 1 complete) . . . . .				
(Black, gray-on-red, 1 complete) . . . . .				
(Black, gray-on-orange, 2) . . . . .				
(Black, red-on-orange, 10, 1 complete) . . . . .				
(Black, white-on-orange, 13, 2 spoons) . . . . .				
(Black, red-on-whiteware, 38) . . . . .				
(Brown, reddish-on-whiteware, 1 spoon) . . . . .				
Three-color, 32, 1 complete . . . . .		(1.45)		
(Black, white, yellow-on-red, 1 complete) . . . . .				
(Black, gray, yellow-on-red, 9) . . . . .				
(Black, white, brown-on-gray, 3) . . . . .				
(Black, white, gray-on-red, 19) . . . . .				
(Black, white, red-on-orange, 1) . . . . .				
Toy vessels . . . . .			25	
Totals . . . . .	2208	100.00	52	4

are not decorated in any way. Otherwise, the redware suggests that found by Strong<sup>1</sup> in Middle Ancon I graves. The Ancon redware however, is characterized by incised design.

3. Two-color negativeware includes two large shallow plates with geometric design and 207 fragments representing probably four constricted-collar globular jars with simple negative patterns on the collars. Only the jar and plate are represented. Neither in shape, design, nor number of colors does this negativeware suggest clear Recuay affiliations.

4. Painted and modeled wares with Tia-

huanacoid affiliations include five complete vessels and 113 fragments, possibly representing some 11 more. Again the typical shape is a constricted-collar jar, including three complete and at least three fragmentary vessels. Of these, three have modeled faces on the collars, two have straight collars, and one a flask-shaped body. Six modeled puma bowls can be counted, if one judges by the fragments of feet, but none is complete. Finally, a double-spout vessel with rounded-bridge, and one complete and two fragmentary angular-bodied bowls with flarings can be added to the list of shapes. Actually, then, the identification of these pieces as of

<sup>1</sup> Strong, 1925, see Pl. 47.

## RÉSUMÉ OF DEEP-TOMB CERAMICS IN TERMS OF SHAPES

Shape	Fragments	Complete	Fragments Estimated <sup>1</sup>
Ollas . . . . .	1064	5	(32)
Small shallow plates . . . . .	93		(12)
Large shallow plates . . . . .		2	
Open round-bottom bowls . . . . .	13		(2)
Flaring-sided cups . . . . .	3		(1)
Shallow plates with annular base . . . . .	5		(2)
Angular-body open-bowls . . . . .	2	1	(2)
Vertical-sided open-bowl . . . . .		1	
One-handle cup . . . . .	5		(1)
Goblets . . . . .	15	3	(4)
Constricted-collar jars . . . . .	637		(7)
With straight collars . . . . .	16	2	(5)
With flare-collars . . . . .	7	1	(5)
With bulge-collars . . . . .	10		(2)
With face-collars . . . . .	35	1	(4)
With taper-collars . . . . .	8	1	(1)
Flask shape . . . . .	8	1	(1)
Angular-body bowl with flare-rim . . . . .	14	1	(2)
Bowl with wide flare-rim (?) . . . . .	15		(3)
Double-spout . . . . .	21	5	(4)
Double-bowl . . . . .		1	
Modeled vessels . . . . .	52	1	(14)
Tripod plates . . . . .	5		(2)
Sieves . . . . .	9	1	(2)
Toys . . . . .		25	
Spoons . . . . .	1	(4)	(1)
Miscellaneous unidentifiable . . . . .	170		(1)
Totals . . . . .	2208	52 plus 4 spoons	(109) plus (1 spoon)

<sup>1</sup> Much restoration has been done, but the task is by no means complete. The estimate here refers to the fragments, exclusive of the complete vessels. It does not follow that 110 vessels will eventually be restored, but that at least 110 vessels are represented by the sherd collection. Thus a single fragment of a double-spout in one tomb represents one vessel in this estimate. In reference to the constricted-collar jars, any indication of the type of collar was utilized.

Tiahuanacoid affiliation is based on the designs and colors, rather than on the shapes. Except for the typical puma bowls, the other shapes do occur in Coast Tiahuanaco sites, but are rarely typical. On the other hand, no piece in this collection has a design as closely resembling the Classic Tiahuanaco as some in the Uhle collections from Pachacamac, Ancon, Supe, and Moche. The designs, in fact, are somewhat like those of the Nazca Y style,<sup>2</sup> particularly those from Nievería classed as Nazca Y influenced.<sup>3</sup>

The suggestion that the tomb collection as a whole bears a certain resemblance to such mixed

Coast Tiahuanaco sites as Middle Ancon I is not based entirely on the ware described as Tiahuanacoid, but also on other details, such as the following:

Painted designs in colors of typical Tiahuanacoid styles, including black, white, yellow-on-red and other two- and three-design colors on red or orange base.

Some designs, such as the horizontal S-band ending in two stylized puma heads.

Modeled puma vessels painted in black, white-on-red.

Goblet-shaped vessels in black, orange, and perhaps redware. It is interesting to note that no decorated goblets are found.

Double-spout bowls with painted design, or of

<sup>2</sup> Gayton and Kroeber, 1927.

<sup>3</sup> See Gayton, 1927, Pl. 92c, d; Pl. 96j.

blackware, and especially the curved-body, double-spout, double-headed, black vessel.

The presence of polished redware, including shapes found in Middle Ancon I, such as straight-collar jars, flask shapes, straight-sided bowls, and ollas with horizontal handles.

Face-collar jars with suggestive Tiahuanacoid designs.

The absence of flat-collar handles on the constricted-collar jars.

The absence of pressed-relief design.

Hand, rather than mould-made vessels.

In spite of the case that can be made for the resemblance to Middle Ancon I, however, there are so many weaknesses that it seems preferable at this time to leave the question open.

5. Clay spoons with straight and loop handles are associated. One in particular has a design of light brown and a reddish color in fine-line cursive style on a white clay. Fragments in this style are frequently found in the region of Cajamarca,<sup>1</sup> but without information on their chronological position.

6. Tripod plates are sparsely represented by five fragments, probably indicating two vessels.

7. Orange and brown plainwares are frequent. Although ollas are commonest, shallow plates with annular bases, simple plates, and pierced plates, like sieves, are also included.

8. Miscellaneous painted pieces should be mentioned, although they present no startling variations. Noteworthy is the absence of the white-on-red style which is found at other sites in this same region. The three small white-on-red fragments which were found are not definitely of this style.

9. Toy vessels do not seem to have great significance as diagnostics, but 25 are included in the tomb collection.

10. Finally, the presence of copper pieces, flint and obsidian points, and a few miscellaneous stone objects completes the mixture.

More evidence will be available for the comparative discussion of this grave collection when the description of the remaining sites in the Wilkawain region is presented.

#### D. STONE BOX GRAVES

The slopes of the hills around Wilkawain and Ichik-Wilkawain have numerous natural boulders, some of immense size. By pit excavation we discovered stone-lined box graves under

many of them. Certainly such graves were made by similar excavation under these rocks, as it is inconceivable that the boulders were actually moved. Some of the boxes were so well placed that they were opened with considerable difficulty. We excavated a total of thirteen of these box graves, and certainly more could have been found had the contents of those excavated justified the effort. As it was, only three contained pottery (and of these only one had more than one piece), one other contained non-ceramic artifacts, and the remaining nine were empty. Presumably all were intended as graves, although only four contained any trace of bones. Some are built immediately under the surface boulder so that the latter serves as a cover. Some are well under the boulders and covered by a stone slab. Since most of these box graves are more or less alike and since so few had contents of any importance, the description of each is presented in tabular form.

1. Site 7H-9A: A 35-centimeter square slab-lined and covered box 50 centimeters deep, located 50 centimeters under a surface boulder. No contents.

2. Site 7H-9B: A 50 by 80 centimeter rectangular slab-lined and rough stone-covered box, 70 centimeters deep, located 1 meter under a surface boulder. No contents.

3. Site 7H-9C: A 70-centimeter square slab-lined and covered box, 50 centimeters deep, located 1.2 meters under a surface boulder. No contents.

4. Site 7H-9D: A 60-centimeter square slab-lined and covered box, 50 centimeters deep, located 1 meter under a surface boulder. No contents.

5. Site 7H-9E: Box tomb like above.

6. Site 7H-9F: Box tomb like above.

7. Site 7H-11A: A 40-centimeter square slab-lined and covered box, 50 centimeters deep, located just under a surface boulder. Contained traces of bones.

8. Site 7H-11B: A 30 by 20 centimeter rectangular slab-lined and covered box, 30 centimeters deep, located just under a surface boulder. No contents.

9. Site 6H-5: A rectangular slab-lined box, located just under a surface boulder which serves as the cover. Contained traces of adult bones.

10. Site 7H-6: A rectangular slab-lined box, located just under a surface boulder which

<sup>1</sup> See Muelle and Blas, 1938, Pl. 72.

serves as the cover. This box grave contained three fragments of silver, one piece of a copper pin, an irregular bead of lapis-lazuli, a short tubular bead, and ten disc beads.

11. Site 7H-7: A 70 by 80 centimeter rectangular slab-lined and covered box, 55 centimeters deep, located 30 centimeters under a surface boulder. It contained traces of adult bones and a single vessel of a unique type. This is an angular-bodied bowl with a flare-rim (Pl. 2a). It is 16.5 centimeters in body diameter, 13 centimeters high, 11 centimeters in rim diameter, and 7 centimeters in base diameter. The bowl is of brownware, decorated on the upper and lower halves of the body with wide incised lines and punch marks. On each side is a double nubbin with a deep punched hole between. The wide incised lines show traces of a fill of red and yellow paint. A similar vessel is owned by Dr. Augusto Soriano Infante but, like this one, without any information on possible associations. No fragment of such incised brownware was found in any other site in this region. Of the total Wilkawain collection, this is the one piece which suggests Chavín ceramics, and it is indeed unfortunate that no data for placing it in relation to other ceramics of the Wilkawain region were obtainable.

12. Site 6H-3A: A 40-centimeter square slab-lined box without covering, 50 centimeters deep, located 1.58 meters under a surface boulder. It contained adult bones and an orange olla. The bowl is globular with a flare-rim and two horizontal flat-loop body handles. It measures 22 centimeters in diameter, 19 centimeters high, and 14 centimeters in rim diameter. The bottom is round.

13. Site 6H-3B: Under the same boulder which covered the previous box grave was another, above and behind it. This second one was an 80-centimeter square slab-lined box, located immediately under the surface boulder which served as the only cover. No traces of bones were found, but eight vessels were included:

An orangeware constricted straight-collar jar with flat base. The body is 14 centimeters in diameter and 14 centimeters high. The collar is 4.5 centimeters high and 6 centimeters in diameter.

A redware globular jar with constricted straight collar. The body is 13 centimeters in diameter and 14 centimeters high. The collar is 3 centimeters high and 5 in diameter.

A globular olla with flare-rim and no handles, with a simple red band on the orange clay base

Two shallow plates, 9.5 centimeters in diameter and 3 centimeters deep, decorated with red curves and dots on the inside. The base is orangeware.

A large shallow plate, 20 centimeters in diameter and 8 centimeters deep, decorated on the inside with red bands on the light gray base clay

Two shallow redware plates, 17.5 centimeters in diameter and 7 centimeters deep

The contents of the stone box graves are too limited for serious analysis. The unusual incised vessel of Site 7H-7 is interesting, but unplaceable in relation to the other ceramics, with the possible exception of the fact that it was in a stone tomb similar to the others. The contents of Site 6H-3B conform in general to the house site material of Site 6H-2 and are not too inconsistent with the deep stone grave contents (Sites 7H-1 to 4).

#### E. UNLINED GRAVES

Other graves found cannot be grouped with the stone-lined boxes, since apparently they represent direct burials, without any particular preparation of the grave. Three of these are described, although one is dubiously a grave.

Site 8H-1: A grave in the southeast end of a low mound was about 1 meter in diameter and the same deep, without lining or covering of any kind. It contained two vessels and one piece of a third which is probably not part of the original contents.

A complete modeled puma vessel is painted in black, white-on-red (Pl. 2f). The elongated body is supported by four short cylindrical legs. The two forelegs have two projections representing toes. The head is modeled in the round with upright ears and an open mouth showing rows of teeth and two sets of crossed fangs. The tail is conical and projects straight back. The bowl has a constricted straight collar. The design consists of circle bands outlined in black and filled with black dots on white paint. One band encircles the neck, and four circles are on the body. The collar and legs are simply decorated. This vessel closely resembles the type indicated by the fragments in the deep-tomb collection. The total length from the tip of the tail to the nose is 27 centimeters. The height to the rim of the collar is 19.5 centimeters. The constricted collar is 4.5 high and 7 centimeters in diameter.

A complete orangeware vessel in the same grave has a slightly angular body and a constricted straight collar (Pl. 2e). A flat wide loop handle, 3 centimeters wide, extends from the center of the collar to the

body. The vessel is 22 centimeters high and 6 in diameter. A band around the upper half is decorated in the pressed-relief technique. The design is composed of two warriors facing each other. The bodies are front view and the heads in profile. Two puma heads are attached by ribbon bands to the waist of each figure. Two sets of similar ribbons, ending in puma heads, project from the head of each figure, the front pairs crossing between them. Each man holds an ax in one hand and grasps the ribbon band of his opponent with the other. In both, long tongues project from the mouth. Neither pressed relief nor such elaborate design units were found in the deep-tomb ceramics.

The upper section of a face-collar blackware vessel with incised body design was also found with the above pieces. Other fragments of this same vessel were found in other parts of the mound, so that the association is probably fortuitous.

Site 8H-2: A partially hollow space, 1.2 meters in diameter and 1.15 meters deep, may possibly have been a grave. It contained broken pieces of a blackware constricted-collar jar with a slightly flaring collar and a pierced nubbin handle at the collar base. Also included were pieces of an orange tripod plate, an orange olla with flare-rim and horizontal handle, a brownware plate with annular base, and a redware constricted-collar jar.

Site 7H-15: An unlined tomb partially between and partially under two large surface rocks contained a total of thirteen vessels: two redware, two brownware, and nine white-on-redware. The pieces are described in detail since the white-on-red style is rare in the materials found elsewhere in the Wilkawain excavations, but appears in the post-Chavín collection.

A convex-sided round-bottom open-bowl of redware, 10 centimeters in diameter and 2.5 centimeters deep (Fig. 12e)

A similar brownware vessel, 8 centimeters in diameter, and 4 centimeters deep

A similar brownware vessel, 14 centimeters in diameter, and 6 centimeters deep

A redware open-bowl with flaring sides and slightly rounded base, 14.5 centimeters in diameter and 6 centimeters deep

A similar vessel, 15.5 centimeters in diameter and 7 centimeters deep, is decorated with a white angular scroll design on a red base (Fig. 12a)

An open-bowl with straight diverging sides and a slightly rounded base is 14.5 centimeters in diameter and 6 centimeters deep (Fig. 12g). The design con-

sists of white horizontal and oblique lines on a red base.

A similar vessel with a flat base is 13 centimeters in diameter and 7.5 centimeters deep (Fig. 12f). The design is of white lines and triangular areas filled with small dots on a red base.

A flaring-sided open-bowl with flat base is 12 centimeters in diameter and 6 centimeters deep (Fig. 12h). The white-on-red design consists of pairs of vertical lines, alternating with sets of four oblique wavy lines.

A similar vessel, 11 centimeters in diameter and 5 centimeters deep, has sets of vertical zigzag white lines on a red base (Fig. 12b)

A vessel similar in shape and size has pairs of white oblique lines, the space between filled with dots on a red base

A vessel similar in shape and size has a simple white-on-red linear design

A small brownware globular jar has a tall cylindrical neck, 3 centimeters in diameter, ending in a slightly flaring rim edge, and a flat neck-to-body handle (Fig. 12d). The body is 9 centimeters in diameter and 7.5 centimeters high, and the neck is 4.5 centimeters high.

A white-on-red double whistling jar has one container about the size and shape of the last vessel described connected by a tube and a flat bridge to a container capped with a human bust (Fig. 12c). Two short arms are in relief. The head with its trisected crest is poorly modeled, and has a relief nose, incised eyes, and an open mouth containing a whistle. The flat handle is decorated with incised lines and dots. Traces of white design on the red base can be seen.

#### OBSERVATIONS ON UNLINED GRAVE MATERIALS

The two grave lots of Sites 8H-1 and 7H-15 are quite distinct in style and were described together for convenience only. Treating the first pair of vessels then (8H-1), it is obvious that both are consistent with the Coast Tiahuanaco periods. The modeled puma vessel is quite similar to one found by Uhle (1903) at Pachacamac in the Epigone level (which is his earliest clearly isolated period at that site). The accompanying orangeware vessel, with its complex pressed-relief design, is remarkably similar to a redware piece illustrated by Kroeber<sup>1</sup> from the Supe Middle Period. The two struggling warriors on the Supe pressed-relief piece are the same in detail as those on the Wilkawain vessel. Kroeber is inclined to place these Supe pressed-relief vessels in a

<sup>1</sup> Kroeber, 1925b, Pl. 71d.

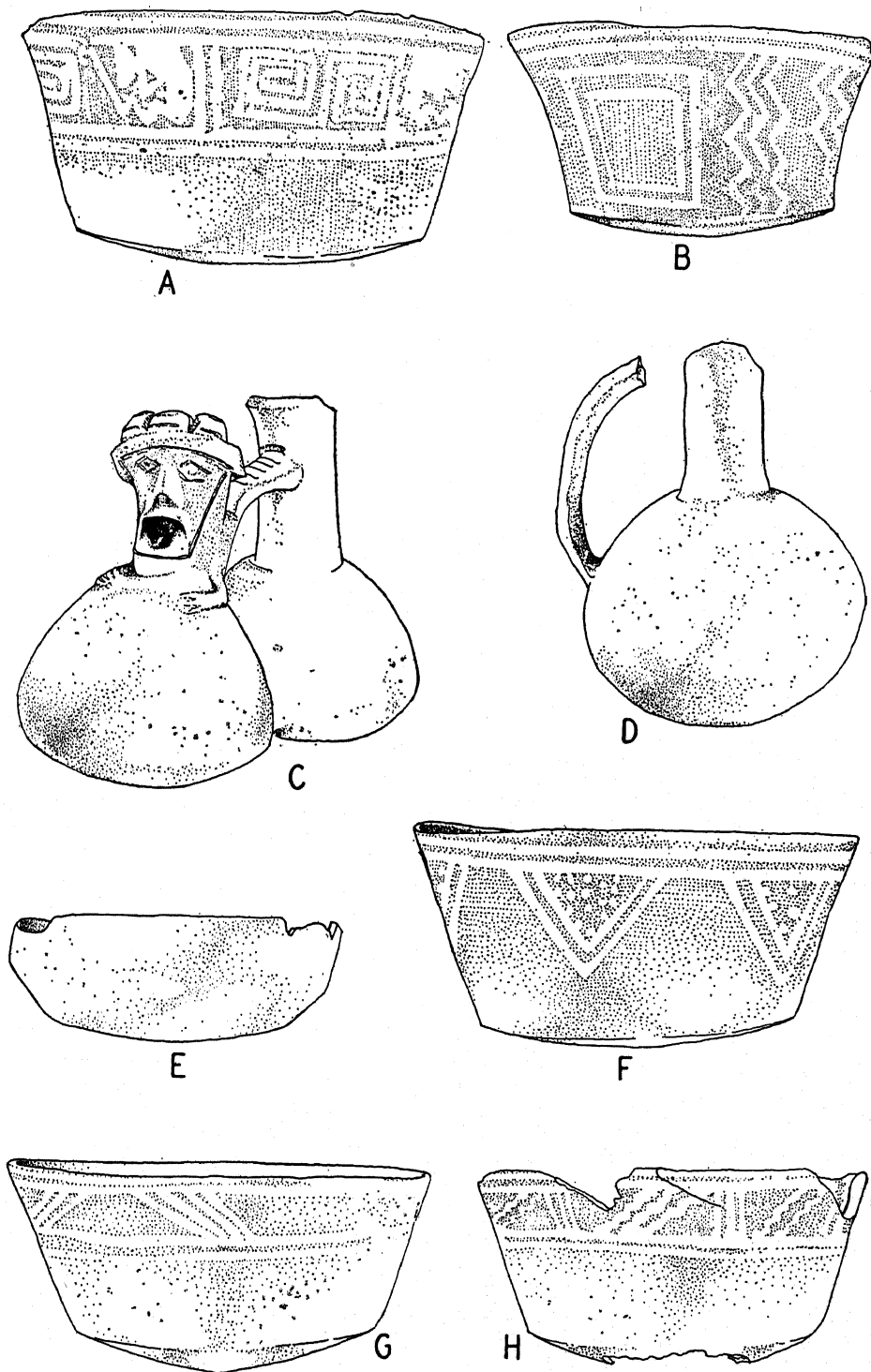


FIG. 12. White-on-redware from unlined grave, Wilkawain.

slightly later phase than the purer Tiahuanacoid styles at the same site. Even in the absence of other finds this one grave would establish a relationship with the Coast Middle Periods.

The white-on-red style from Site 7H-15 is more puzzling. Some of the vessels have the shape of the flaring-sided cup so typical of Highland Tiahuanaco. Even the simple oblique zigzag, wavy lines, the angular scroll, and the dot-filled triangles are found in the Decadent Tiahuanaco style, although usually with black color as well as white. In the Wilkawain region only the mixed refuse of Site 9H-2 contained more of this white-on-red style. On the other hand, vessels which must belong to the same style were found in intrusive graves at Chavín. A comparison with the white-on-red Chancay style as isolated by Kroeber<sup>1</sup> is suggested, in spite of the fact that the differences are many. On the basis of Grave 7H-15 it is clear that a white-on-red style can be isolated, but the time relationship with other Wilkawain material is not clarified.

#### F. SUBTERRANEAN HOUSE SITES

In the area of Site 9H immense boulders and large flat rocks are exposed on the surface. Several of these had served as coverings for subterranean houses. Four were seen in total, and two examined in more detail.

House 1, Site 9H-1. Two large flat surface rocks had served as a covering for a room excavated beneath. In general its shape follows that of the surface rocks, with a central section 5.6 by 2.25 meters and a niche, 1.5 meters wide and 1.2 meters deep, at one corner. The original entrance at the south was 1.57 meters wide, but was mostly filled with washed dirt. The floor of the room was 2.5 meters below the roof stone, and the walls were made of rough stone mixed with some good-sized boulders. The walls are poorly made, and one section of the room had partially caved in, although the rest was still open. Clearing the floor produced some 30 fragments of straight, orange clay trumpets, including four flaring-mouthed pieces, and nine plain, crude orange sherds. The trumpets resemble those found in the Recuay style galleries to be described later.

House 2, Site 9H-2. A large flat rock, about

4 by 3 meters and over 1 meter thick, served as a roof for a second subterranean dwelling. A stone-lined doorway, 50 by 50 centimeters, was at the south side. The interior was filled with dirt and house refuse practically to the roofing stone, probably due to washed-in fill. Partial excavation of this fill produced a miscellaneous collection, including four complete bowls, a spoon and various fragments, and 829 sherds. A number of styles are represented, but unfortunately the nature of the fill and the cramped excavation required if a large scale operation was to be avoided, make it impossible to state that all the materials are contemporaneous. The mixture is described again in terms of wares, plus a few special categories.

#### MATERIALS FROM THE SECOND SUBTERRANEAN HOUSE SITE

##### Plainware

Orangeware, 1 complete and 588 fragments. By far the largest proportion of the pieces in the total collection is plainware, basically orange, but frequently with a brownish tinge and a burnt black due to use. The pieces are listed in tabular form.

572 Fragments of ollas. The typical olla form represented has a globular body with rounded base and a flaring rim. A few fragments represent a high flaring rim, more like a somewhat constricted collar. Only two flat loop-handle pieces are included, and two plain body lugs.

9 Thick orange fragments from an open vessel with a projecting ridge just below the rim

1 Complete shallow open-bowl with a plain rim and rounded base, 13 centimeters in diameter and 4.5 centimeters deep

3 Pieces of solid round handles

1 Piece of flat handle or bridge

2 Conical handles suggesting Recuay types (Fig. 13c)

1 Fragment of an open-bowl with an inflaring rim, flat on top and decorated with a relief hook

##### Polished Monochrome Wares

Blackware, 7 fragments. Blackware is decidedly rare, and the fragments, while well polished, are without pressed-relief or stipple decoration. Four fragments are from straight-sided goblets, one representing a goblet with raised band below the rim. The remaining three pieces are from a globular-bodied vessel.

Redware, 84 fragments. These pieces are all

<sup>1</sup> Kroeber, 1926, Pl. 87c, d, e.

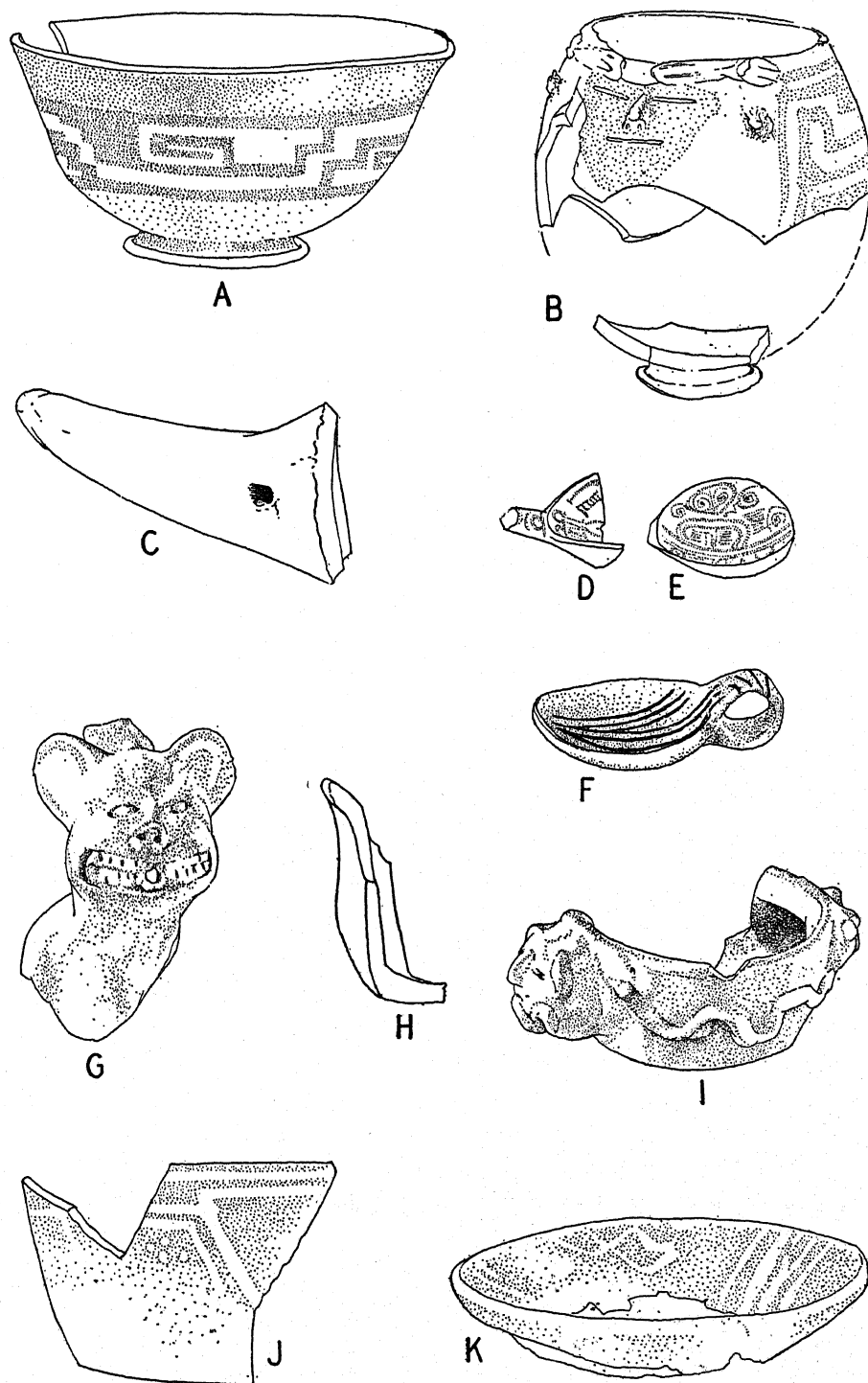


FIG. 13. Ceramic styles from subterranean house site.



from red-slipped or painted monochrome vessels, and most of them are polished.

77 Fragments of constricted-collar jars, including 13 pieces of flare-collar. Other collar types are not indicated.

- 4 Fragments of shallow plates
- 2 Fragments of open convex-sided bowls
- 1 Fragment of a cylindrical neck or spout and rounded handle

### Negativeware

Negativeware is represented by a fragment of a large high-collar vessel with a step design. This is two-color negative, in a black and orange combination. There are also two small fragments which appear to be three-color negativeware. Twenty-three pieces of a large vessel have a wide orange line on a burnt clay base which may possibly be negative design.

### Painted Grayware

Three complete vessels and 20 fragments of a special painted grayware are part of the collection. No trace of a burial was found, but the pieces from these vessels were found in the refuse. The base color of the clay is gray. The design on the outside is painted in a reddish-brown color on a whitened base. An orange band forms an irregular part of the pattern.

1 Complete open-bowl with convex sides and a flare-rim measures 15.5 centimeters in diameter and 7 centimeters high (Fig. 13a). The base is annular and 5 centimeters in diameter. Three rough cuts on the base resemble a potter's mark. A step-and-hook design painted in reddish-brown on a whitened area forms a band around the side. Two orange bands encircle the vessel, one near the rim edge, and one through the middle of the above design.

1 Complete open-bowl with plain rim and annular base is roughly the same size as the above. A simple interlocking linear design is painted in the same color combinations over a gray base clay.

1 Restorable convex-sided plain-rim vase with annular base has a relief face on one side (Fig. 13b). Two relief arms are along the rim edge with the face immediately below them. On the reverse side is a simple linear design in the typical colors.

19 Pieces of a grayware vase, but without painted design

- 1 Red-on-gray painted piece

### White-on-Redware

Eleven fragments are of the white-on-redware style described previously from Site 7H-15.

Nine pieces are from flat-based flaring-sided cups (Fig. 13h,j). A semi-complete open plain-rim dish with an annular base has a crude white wavy design inside (Fig. 13k). One is a fragment of a small bowl.

### Modeled and Relief Pieces

Twenty pieces represent modeled or relief-decorated vessels. While not a distinctive group in themselves, they do not properly belong with the other wares described.

1 Redware fragment with relief design represents two arms of a human figure. The right hand is a disc, but the left is represented as holding a club. Part of a necklace is portrayed. The general impression is that of Early Chimú style, but the fragment is too small for identification.

1 Redware fragment with traces of white paint is the head of an animal which seems to form one end of a handle (Fig. 13g). This might possibly be part of the white-on-red style.

- 1 Redware fragment of relief animal feet
- 1 Orange animal head lug with crossed fangs
- 4 Redware pieces with relief designs, one part of a human face, two bird heads, and one band
- 3 Pieces of a vertical-sided open-bowl with annular base of a thick orangeware, with an animal head lug on either side, and a snake-like relief band on the side (Fig. 13i)

9 Slightly modeled pieces

### Trumpets

Twenty-three fragments of straight, orangeware trumpets with flaring mouthpieces are like those found in the first house (9H-1) and in the Recuay galleries.

### Miscellaneous Painted Pieces

6 White-on-orange fragments of a large olla with flat handle

3 Red-on-orange pieces of a large olla with high collar

2 Orange-on-white pieces, one with cross-hatch design

2 Yellow-on-red fragments

12 Red-on-buff pieces from a shallow plate with an interior design of a line and concentric circles

5 Black-on-red fragments of a constricted, bulge-collar jar with linear design

4 Red-on-white clay fragments, slightly modeled, which resemble Recuay style

7 Miscellaneous small painted fragments

## RÉSUMÉ OF COLORS OF SUBTERRANEAN HOUSE SITE COLLECTION

	Fragments	Per Cent	Complete Pieces
Plainware . . . . .	643	77.56	1 complete
Orangeware, 624, 1 complete . . . . .		(75.27)	
Grayware, 19 . . . . .		(2.29)	
Polished monochrome . . . . .	97	11.70	
Blackware, 7 . . . . .		(.84)	
Redware, 90 . . . . .		(10.86)	
Negativeware . . . . .	26	3.13	
Two-color, 1 . . . . .		(.12)	
Three-color, 2 . . . . .		(.24)	
Doubtful, 23 . . . . .		(2.77)	
Positive paintedware . . . . .	63	7.61	3 complete
One-color, 55, 1 spoon . . . . .		(6.64)	1 spoon
(Red-on-gray, 1) . . . . .			
(Black-on-orange, 1 spoon, 1) . . . . .			
(White-on-red, 12) . . . . .			
(White-on-orange, 6) . . . . .			
(Red-on-orange, 3) . . . . .			
(Orange-on-white, 2) . . . . .			
(Yellow-on-red, 2) . . . . .			
(Red-on-buff, 12) . . . . .			
(Black-on-red, 5) . . . . .			
(Red-on-white, 4) . . . . .			
(Miscellaneous, 7) . . . . .			
Two-color, 8, 3 complete . . . . .		(.97)	
(Reddish-brown, orange-on-gray, 3 complete) . . . . .			
Light brown, dark brown-on-white, 8 spoon fragments . . . . .			
Total . . . . .	829	100.00	4 complete 1 spoon

## Clay Spoons

The one complete clay spoon and nine fragments represent two styles. The complete spoon (Fig. 13f) and part of another are of one type, namely, an oval bowl (4 by 6 centimeters) with a flat-loop handle, painted in vertical black lines on an orange clay. The remaining eight fragments are of round-bowled spoons with straight handles (Fig. 13d, e). The design is cursive and is formed of fine lines in both light and dark brown on a white clay. It is again the style of Cajamarca, and of one spoon in the deep-tomb collection.

## Metal Artifacts

Two pieces of copper were the only metal artifacts found, one a thin bar, 6.5 centimeters

long and 7 millimeters wide, and the other a fragment of a copper plate.

## Stone Artifacts

Six stone beads of small size can be described as a flat disc, a tubular bead, three grooved turquoise (?) beads, and a small club-shaped black stone.

## OBSERVATIONS ON SUBTERRANEAN HOUSE COLLECTION

It was stated previously that the house collection need not be contemporaneous, in contrast to the material from the deep tombs. On the other hand, there is no excavation evidence for the separation of the various styles represented. The concept of a subterranean house is

TABLE OF SHAPES SUGGESTED BY SUBTERRANEAN HOUSE COLLECTION

	No.	Per Cent	
Ollas . . . . .	578	69.72	
Large, high-collar jars . . . . .	4	.48	
Shallow plates . . . . .	16	1.93	
Open convex-sided bowls . . . . .	2	.24	1 complete
Open-bowl with annular base . . . . .	1	.12	2 complete
Open-cup with annular base . . . . .			1 complete
Open-bowl with ridge below rim . . . . .	9	1.08	
Open-bowl with inflare rim . . . . .	1	.12	
Open-bowl with relief heads . . . . .	3	.36	
Flaring-sided cup . . . . .	9	1.09	
Goblet . . . . .	4	.48	
Constricted flare-collar jar . . . . .	77	9.29	
Constricted bulge-collar jar . . . . .	5	.60	
Flare-collar vase . . . . .	19	2.29	
Cylindrical neck and handle . . . . .	1	.12	
Modeled . . . . .	21	2.56	
Solid round handles . . . . .	3	.36	
Flat bridge . . . . .	1	.12	
Conical handle . . . . .	2	.24	
Trumpets . . . . .	23	2.77	
Spoons . . . . .	9	1.09	1 complete
Undetermined . . . . .	41	4.95	
Total . . . . .	829	100.00	4 complete 1 spoon

suggestive of Recuay, although it is not a certain identification. In any case the contrast with the above-ground houses in the same region is marked. Certain features of the collection are also reminiscent of Recuay, namely, the straight trumpets, the conical handles, the two possible three-color negative pieces, and the red-on-white slightly modeled fragments. However, the lack of negativeware or any other outstandingly characteristic Recuay style piece should be emphasized.

Represented by complete pieces in an otherwise definitely refuse site one new style is encountered in the collection—grayware annular-base vessels with simple designs in reddish-brown plus orange on a whitened area.

The white-on-red style, isolated in the grave of Site 7H-15, and the cursive-designed spoons of Cajamarca style are both represented, but little is added to the general problem of placing these styles.

In spite of the geographic proximity to the deep tombs, previously described, only a few parallels in the two collections can be traced,

namely, the simple blackware, the redware constricted-collar jars, the loop-handled spoons, and the orangeware ollas. On the other hand, the differences are enormous. The absence of the Tiahuanacoid features, so obviously a part of the deep-tomb collection, is startling. There are no modeled pumas, no designs suggestive of Tiahuanaco Epigonal, no typical Tiahuanacoid color combinations, and no two or more colored wares (the two groups of two-color wares are covered by the special grayware and the cursive spoons). Even the lack of two-color negative is surprising.

Treated as a unit the collection is almost impossible to place in relation to other finds in the region. The breakdown into styles is convenient, but not secure evidence for time placing.

#### G. SUBTERRANEAN GALLERIES

Seven subterranean galleries were located on the slopes below Ichik-Wilkawain, and two more were found across the ravine at the site at Irwa. All of these are more or less alike and can be described together. Most of the galleries

were at least partially opened, or apparently had been, but two were found with the entrances still intact and sealed. All were excavated down to the hard-packed clay floors. The variations in measurements and details are given in a tabulated list below, and a descrip-

tion of one intact gallery should serve for the type (Fig. 14). The entrance to the gallery of Site 7H-12 is an irregular shaft, lined with a stone wall, measuring some 65 centimeters wide and 1.18 meters long (Pl. 3b). The shaft extends to a depth of 2 meters. The lower half of the shaft is hollow and, when discovered, was covered by a stone slab which extended across it, resting on a specially constructed ledge. The upper half, above the slab, had been filled with small stones up

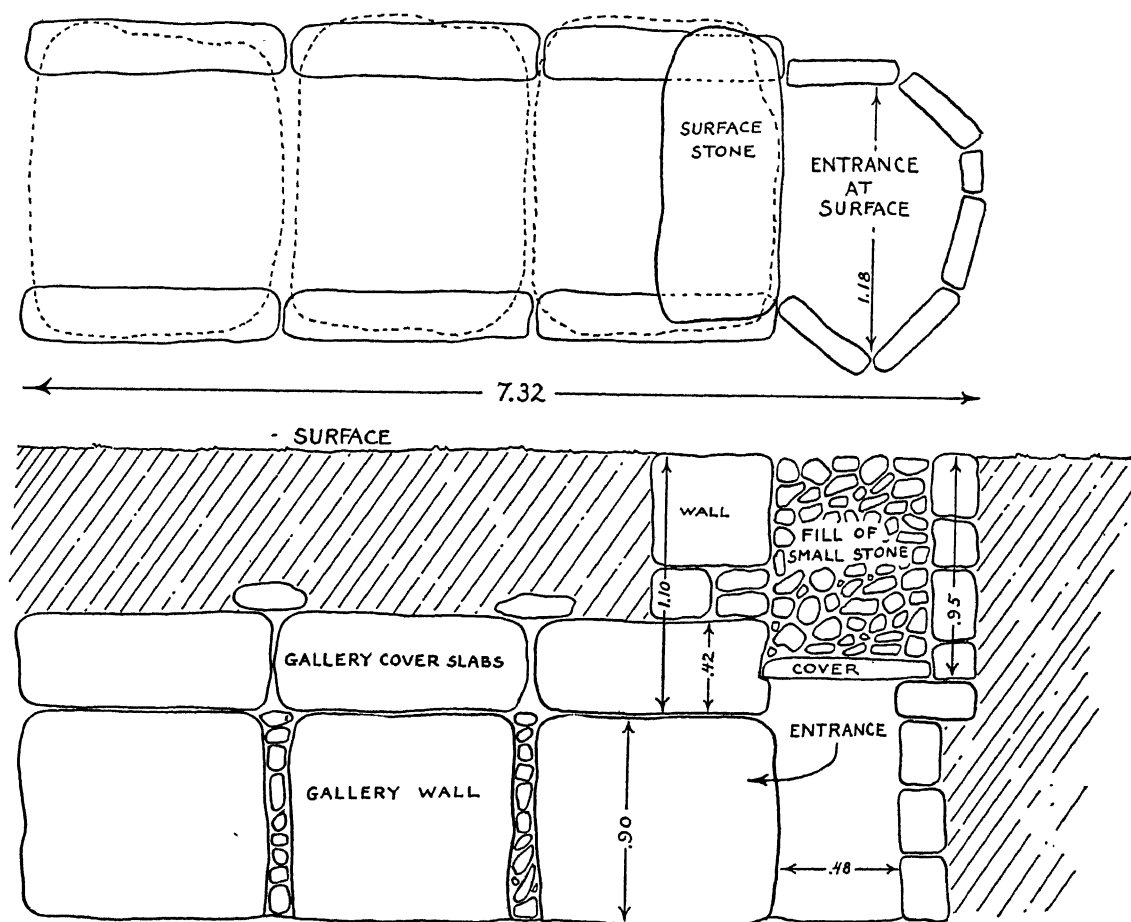


FIG. 14. Groundplan and cross-section of Recuay style gallery, Wilkawain.

tion of one intact gallery should serve for the type (Fig. 14).

The entrance to the gallery of Site 7H-12 is an irregular shaft, lined with a stone wall, measuring some 65 centimeters wide and 1.18 meters long (Pl. 3b). The shaft extends to a depth of 2 meters. The lower half of the shaft is hollow and, when discovered, was covered by a stone slab which extended across it, resting on a specially constructed ledge. The upper half, above the slab, had been filled with small stones up

gallery itself). The actual gallery is 7.32 meters long, 95 centimeters wide, and 90 centimeters high. The floor is of hard-packed clay, and exactly 2 meters below the ground surface. The sides are faced with eight slabs each, and another slab faces its back end. Small stones are carefully inserted to fill in the irregularities between the slabs. Eight large slabs, again carefully chinked, form the roof. The whole gallery had been so well constructed and sealed at the entrance that only a thin layer of silt covered

the hard clay floor. In spite of the fact that no one had opened this site before, nothing but the powdered remains of a few bones was found in it.

Other galleries are essentially the same as this one. Some are longer; some are much closer to the surface; some have rectangular rather than irregular oval entrances. Others contained some pottery. Orientation is not consistent in spite of a general north-south arrangement. A brief tabular description of all the galleries follows:

Site 7H-5B: A gallery over 20 meters long, 1.5 meters wide, and 1.2 meters high with the roofing stones 1 meter below the ground surface. This site is described in more detail later. It contained a few sherds of Recuay style pottery.

Site 7H-8: A gallery 5 meters long, 1 meter wide, and 90 centimeters high with the roofing slabs just below the ground surface. The entrance was at the southeast end. It contained one complete vessel.

Site 7H-10: A gallery 4 meters long, 1.1 meters wide, and 70 centimeters high with the roofing stones just below the surface. The entrance had caved in. Two restorable vessels were found.

Site 7H-12: The type gallery described previously.

Site 7H-13: A gallery 10.1 meters long, 1.15 meters wide, and 95 centimeters high, with the roofing stones 80 centimeters below the ground surface. Like that at Site 7H-12, the entrance to this gallery was intact, with a stone-filled shaft 1 meter by 66 centimeters and 1.75 meters deep. The actual gateway to the gallery from this vertical shaft is 77 centimeters wide. It contained fragments of Recuay style pottery.

Site 7H-14: A gallery 6 meters long, 1.15 meters wide, and 90 centimeters high with the roofing stones about 25 centimeters below the ground surface. The entrance had been opened previously. It contained a few sherds.

Site 7H-16: A gallery 10 meters long, 1.2 meters wide, and 1 meter high, with the roofing stones 1.5 meters below the ground surface. It had previously been opened, but still contained a few sherds.

Site 10H-1: A gallery 5.27 meters long, 1.32 meters wide, and about 90 centimeters high, with the roofing stones just below the ground surface (Pl. 3a). The entrance was rectangular,

about 85 centimeters by 63 centimeters. Three slabs form the roof. A niche in the eastern wall is 30 by 30 centimeters square and 52 centimeters deep. This is the only gallery that had any variation on the plain walls. Sherds of Recuay type were found.

Site 10H-2: A gallery 5 meters long, 1.3 meters wide, and 90 centimeters high, with the covering slabs just below the ground surface. It had previously been opened, but a few sherds were still to be found.

#### MATERIALS FROM SUBTERRANEAN GALLERIES

The nine galleries furnished relatively little material. Actually, six complete vessels were found and 267 sherds representing at least 21 more vessels, although neither complete nor restorable. No gallery contained enough material to justify separate treatment and so the collection is described here as a unit. Actually the materials from the various galleries are quite consistent in style. Three-color negativeware, fragments of clay trumpets, and indicated shapes all conform to the Recuay style and are found in nearly all the galleries. No style or shape inconsistent with the known Recuay was found. Consequently, it is even more logical to treat the collection from the nine galleries as a unit. The materials are described in terms of type of painted decoration.

#### Plainwares

Brownware, 28 fragments.

4 Fragments of straight trumpet (Recuay O-2)<sup>1</sup>

8 Pieces of a plain open round-bottom bowl (Recuay A-1)

14 Pieces of a thick brown globular vessel with a relief design of a hand holding a disc (possibly Recuay E)

2 Miscellaneous fragments

Orangeware, 91 fragments. Eighty-four of these fragments are from straight clay trumpets. A typical trumpet has a flaring mouthpiece about 3.2 centimeters in diameter and a straight tube which diverges gradually to a plain end about 5.3 centimeters in diameter. The remaining seven pieces are of crude orange.

Whiteware, 1 fragment.

<sup>1</sup> Reference to the Recuay pottery classification, see pp. 101-102 and Fig. 32.

### Negativewares

Black-white-red negativeware, 78 fragments. Negative-painted vessels with sharp black-white design with the addition of red coloring, either in negative technique or positive painting, are typical of Recuay style (Fig. 18b). No complete vessel was found, but a number are partially restorable, and indicate shapes and designs equally typical of Recuay.

16 Fragments of one large vessel. The upper part is missing, but the general appearance is that of a collar-jar with a short bridge to a modeled head (Recuay H-1). On the body is a relief arm with a square shield. A stylized cat head represents the hand. Sets of vertical and horizontal straight and wavy lines are on the back of the vessel.

20 Pieces of one large vessel, with all the upper part missing. Again, this is possibly a shape like the previous one described (Recuay H-1). The base clay is buff, on which the black-white-red negative design is superimposed. Around the bottom part of the vessel is a band of rectangles filled with rows of dots. Above this is part of a complex design probably representing a Recuay cat.

12 Pieces of a vessel similar to the above, with part of the collar and bridge. On one side is a good section of a seated Recuay cat design, flanked by an interlocking pattern resembling a ray fish.

30 Miscellaneous pieces include part of a base with two feet in relief, a section with a wing-like body lug, a piece of disc rim, and a constricted collar. All show traces of complex designs.

Two-color negativeware, 1 complete, 9 fragments. None of these pieces is of the negative type found in the deep tombs.

1 Essentially complete dipper with open bowl, 9.3 centimeters in diameter and 6 centimeters deep, has a hollow conical handle, 3.8 centimeters at the base and 10.5 centimeters long (Fig. 15f). The tip is missing, so that it is impossible to state whether or not it ended in a modeled human head. The general shape is common in Recuay collections (Recuay B-4). On the handle is a simple geometric design in black-orange negative.

4 Pieces of one open-cup (Recuay A-1) with black-white negative design

4 Miscellaneous pieces with black-white negative design. It is possible that these are small fragments from black-white-red negative vessels.

1 Fragment of black-red negativeware

### Positive Paintedwares

The remainder of the ceramic collection consists of positive painted pieces, five complete and 60 fragments.

White-on-red, 2 complete. These two pieces represent Recuay styles with no obvious relationship with the white-on-red style of Site 7H-15.

1 Complete globular vessel with a constricted flare-collar and short bridge to a modeled human head (Recuay H-1), painted simply in white on a red base (Fig. 15a). The head is reasonably well modeled with a wide headband and a simple headdress above. Two disc earplugs are decorated with small circles. On each side of the head is a modeled animal.

1 Complete open-bowl (Fig. 15e) with conical handle (Recuay B-1). The bowl is 14.5 centimeters in outer rim diameter and 7 centimeters high. The sides of the bowl have a very slight bulge, the base is flat, and the rim projects at a right angle, being 1.6 centimeters wide on top. Around the rim is a simple design, in white paint on a red base, a square with a dot inside. The conical handle projects from near the base and is 9 centimeters long and 3.5 centimeters at the base.

Red-on-orange, 1 complete, 14 fragments. The fragments represent two vessels. All three in this style are the same shape.

1 Complete open-bowl (Fig. 15c) with a plain rim and an annular base (Recuay A-2). The bowl is 14 centimeters in diameter and 8 centimeters high, with an annular base 6.5 centimeters in diameter. Red bands form a simple design on the orange clay.

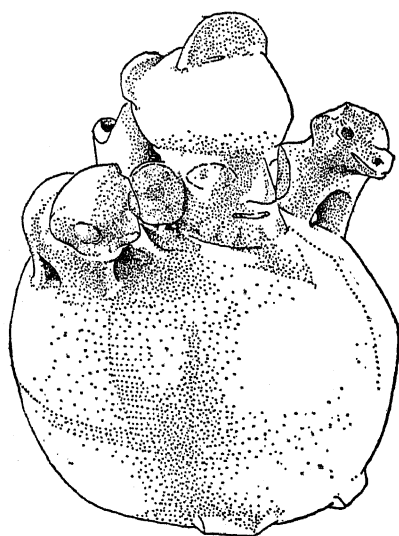
9 Fragments of a vessel similar in shape and design

5 Fragments of a similar vessel, with wide red bands plus a cross-hatched area on the orange clay (Fig. 15d)

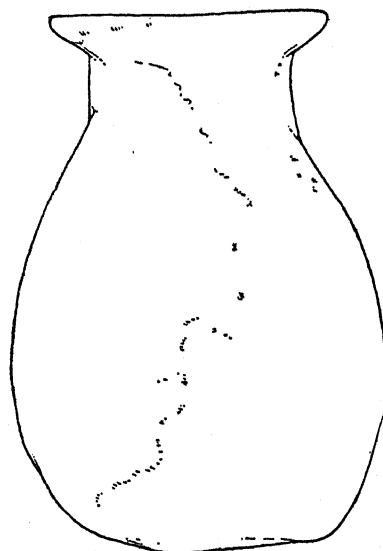
Red-on-gray, 1 complete (Fig. 15b). An elongated globular vessel with a flat base, constricted neck, and flare-rim is 19 centimeters high, 14.5 centimeters in body diameter, and 9 centimeters in rim diameter (Recuay F). The clay is gray and crude, and the design consists of elongated red daubs around the neck. While unique in the collection, it is not the special grayware of Site 9H-2.

Red-on-buff, 1 complete. An exceptional vessel represents a deep open-bowl, with plain rim and annular base. The rim diameter is 12.5 centimeters, the height 11 centimeters. A clay trumpet starts at the rim and encircles the bowl three times. The mouthpiece projects above the rim, and the horn extends outward from the lower part of the bowl. The trumpet is painted in red lines on the buff clay. The shape is a special category of Recuay A type.

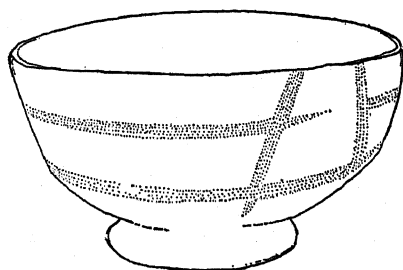
Red-on-white slip, 38 fragments. All but one



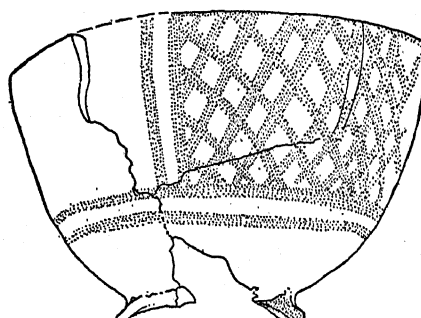
A



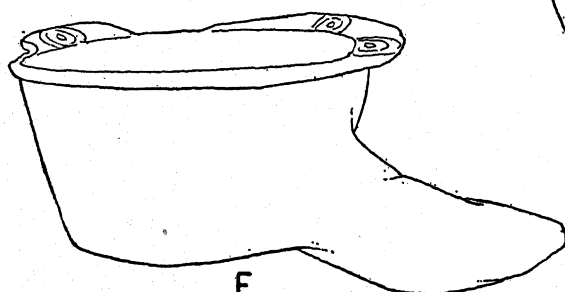
B



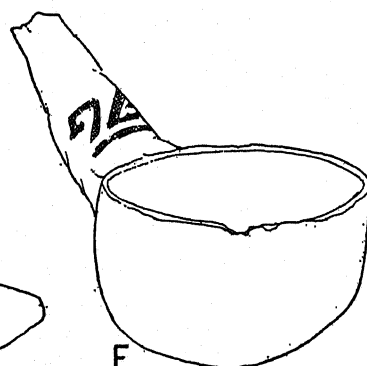
C



D



E



F

FIG. 15. Recuay style ceramics from galleries, Wilkawain.

## RÉSUMÉ OF TYPE OF PAINTING IN GALLERY COLLECTION

	Pieces	Per Cent	Complete
Plainware . . . . .	120	44.95	
Brownware, 28 . . . . .		(10.49)	
Orangeware, 91 . . . . .		(34.08)	
Whiteware, 1 . . . . .		(.37)	
Negativeware . . . . .	87	32.58	1
Black-white-red negative, 78 . . . . .		(29.21)	
Black-white negative, 8 . . . . .		(3.37)	
Black-red negative, 1 . . . . .			
Black-orange negative, 1 complete . . . . .			
Positive paintedware . . . . .	60	22.47	5
White-on-red, 2 complete . . . . .		(5.24)	
Red-on-orange, 14, 1 complete . . . . .			
Red-on-gray, 1 complete . . . . .			
Red-on-buff, 1 complete . . . . .			
Red-on-white slip, 38 . . . . .		(14.23)	
Red-and-white, 4 . . . . .		(1.50)	
Black outside, red inside, 2 . . . . .		(.75)	
Miscellaneous, 2 . . . . .		(.75)	
Totals . . . . .	267	100.00	6

of these fragments are possibly from a single vessel. On top of a globular vessel is the bust of a modeled figure covered by a roof supported by two pillars. The figure has appliqué eyes and

ears and two short arms. Behind the figure is some kind of wall with a cut-out step design. The vessel is far from complete. Three constricted collars are included, but possibly only

## RÉSUMÉ OF SHAPES REPRESENTED BY GALLERY COLLECTION

Recuay Shape	Descriptive Shape	Frag-ments	Per Cent	Com-plete	Estimate of Frag-ments
(Recuay A-1)	Plain open-bowl . . . . .	12	4.49		(2)
(Recuay A-2)	Annular-base open-bowl . . . . .	14	5.24	1	(2)
(Recuay A-3)	Trumpet around bowl . . . . .			1	
(Recuay B-1)	Conical-handle bowl . . . . .			1	
(Recuay B-4)	Conical-handle dipper . . . . .			1	
(Recuay E)	Globular body with relief . . . . .	14	5.24		(1)
(Recuay F)	Flare-neck vase . . . . .			1	
(Recuay E)	Flare-rim deep bowl . . . . .	3	1.12		(2)
(Recuay G)	Disc-rim jar . . . . .	1	.37		(1)
(Recuay H)	Collar and bridge to head . . . . .	21	7.87		(2)
(Recuay H-1)	Collar and bridge to head . . . . .	28	10.49	1	(2)
(Recuay H-4)	Head under roof . . . . .	37	13.86		(1)
(Recuay I)	Connected fruit . . . . .	4	1.50		(1)
(Recuay O-2)	Straight trumpets . . . . .	88	32.96		(7)
Unidentified sherds		45	16.85		
	Totals . . . . .	267	100.00	6	(21)



one belongs to this vessel. Also, a short cylindrical body-spout seems to be from the same vessel. The other piece, from a different gallery, is a constricted-collar with red lines on the white slip.

Red-on-white, 4 fragments. All four are from one vessel which represents four connected oval fruits, painted alternately red and white (Recuay I).

Black outside, red inside, 2 fragments.

#### Metal Artifacts

Three galleries contained fragments of copper. One piece is a pin with a wide disc head, like a nail.

#### Stone Artifacts

Two beads, one of disc type and one with groove, were the only stone objects found.

#### OBSERVATIONS ON SUBTERRANEAN GALLERIES AND COLLECTIONS

Both in architecture and collections recovered the galleries form a consistent unit. The general construction of the subterranean gallery and the particular type of slab-wall are distinct from all other building units in the vicinity. Likewise, these subterranean rooms have the only architecture which seems clearly identified with Recuay style. The function of the galleries presents a problem. They do not seem practical as dwellings, because although well made, they are damp and without proper ventilation. Furthermore, the ceramics are essentially of grave type. The absence of house-type refuse or utilitarian wares is marked, in spite of the fragmentary nature of the collection. Some were certainly used as graves as witnessed by the presence of powdered bones. The fragmentary nature of the ceramics is difficult to explain. While most of the galleries had been previously opened, the two which had the entrances intact also produced fragmentary pottery or nothing.

The ceramics are clearly of the Recuay style. None of the wares found in other sites in the vicinity is represented. In fact the unique type which occurs in other sites is the straight, orange trumpet. Otherwise no Tiahuanacoid influence, none of the typical black-orange negative, no blackware, redware, or other style is represented. The collection is unfortunately too small to confirm any subdivision of Recuay style. It is obvious that Kroeber's Recuay B

style is not represented, and that Tello's Andean Archaic style is likewise missing. On the other hand, this negative evidence is not sufficient to validate either Kroeber's or Tello's styles. An attempt to glean a few more crumbs of interpretation from these gallery collections is made later in the general discussion of Recuay style.

#### H. HOUSE-GALLERY STRATIFICATION

Site 7H-5A-B has been reserved for discussion here, as it presents the one good example of construction stratification (Fig. 16). Located on the slope below Ichik-Wilkawain was a four-room two-story stone house, partially covered by wash from above, so that it had the appearance of a mound. The lower floor was composed of two long narrow rooms, 6.13 meters long, 1.3 meters high, and slightly different in width, one being 1.1 meters and the other 1.23 meters. The ceilings of both rooms were formed of slabs resting on stones which projected from the side and center walls. The two rooms were connected by a doorway through the middle of the 50-centimeter thick central wall. Opposite this doorway, at the north, was the original entrance to the building. The second floor which was caved in had two similar rooms roofed with large slabs which had once been capped with dirt and stone.

Excavation in the fill on the first floor resulted in a collection quite similar to the general material from the deep tombs, as will be seen in the analysis which follows. At one point, the floor had caved in slightly, revealing the cover-slabs of a subterranean gallery beneath the house. Considerable effort was required to break through the roof, but once entered it proved to be not essentially different from those previously described. It is included in the list of galleries as Site 7H-5B. It extended some 20 meters in length, 1.48 meters in width, and 1.2 meters in height. It was actually under the north wall of the house, rather than directly under the north room. The entrance had once been on the far side of the house, but had long since caved in. The relationship of the house to the gallery is purely fortuitous.

#### THE HOUSE COLLECTION

Some burial material seems to be mixed with the house collection, although everything ex-

cept the toy vessels was broken. Most of the material appears more like house than burial refuse. As such, it follows the general type of the deep tombs.

7 Toy vessels complete. Except for a small plate which has a negative, linear design inside, all are crude orange or brown, without decoration. Four toy ollas with two horizontal handles, a plate, a shallow tripod vessel and a vase with two off-center vertical

10 Pieces of polished redware, including three pieces of an open straight-sided bowl

4 Pieces of a constricted-collar flask-shaped vessel, decorated in black-orange negative design. These four pieces and the toy plate mentioned above are the only negative painted pieces.

1 Large fragment (18 by 13 centimeters) of 7-millimeter thick brownware represents a section of a face with details in incision and relief (Fig. 10f). The eye, a raised dome, surmounts a stepped tear-

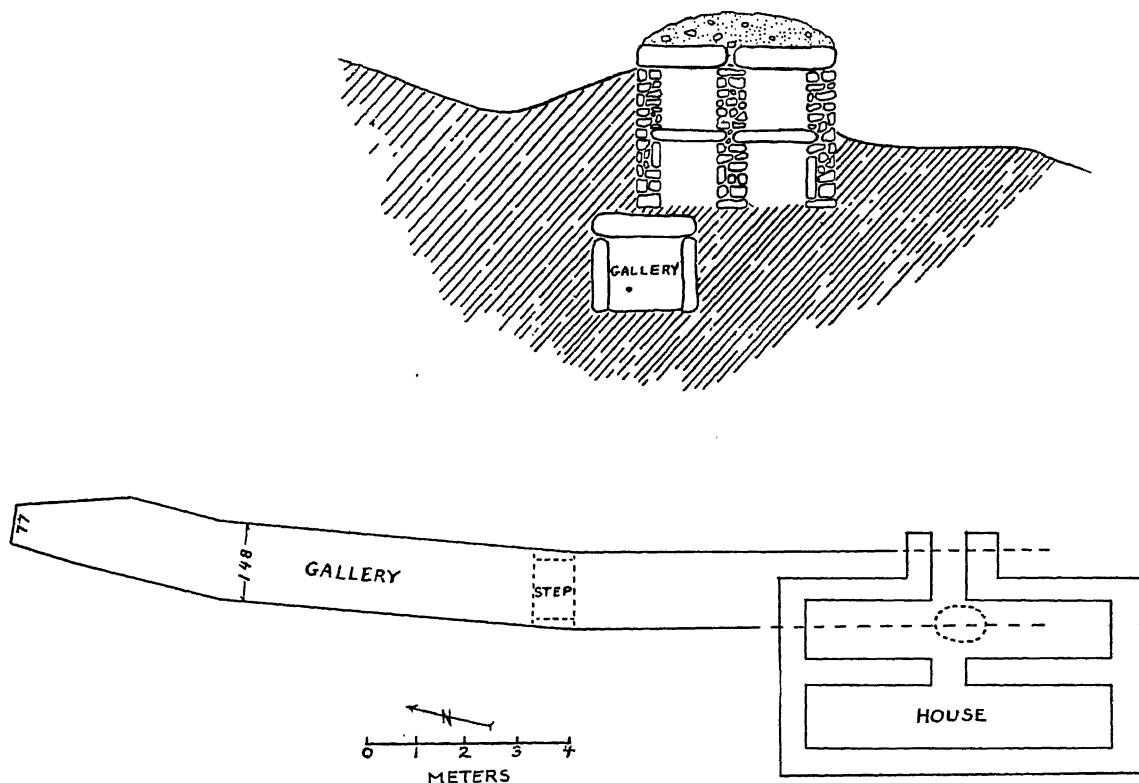


FIG. 16. Groundplan and cross-section of house-gallery stratification, Wilkawain.

body-handles and a body-lug comprise the toy vessels.

1 Complete orangeware olla with globular body, flare-rim, and two horizontal flat-loop handles

100 Orangeware fragments from high-collar ollas

2 Extra-thick orangeware fragments

1 Orangeware conical handle or tripod leg

7 Plain brownware fragments

16 Polished blackware fragments, including nine from one goblet with a thick rim edge and three relief faces (Fig. 6f), measuring 8.5 centimeters in diameter and 8.5 centimeters high. Six other pieces are from the base of a blackware vase; one is a blackware spout.

band. The nose is in high relief. Incised step designs cover the nose and the rest of the face. Above the eye are three incised, stylized puma heads. The Tiahuanacoid influence is obvious.

4 Pieces of black, white-on-orangeware represent a constricted-base vessel with animal heads projecting from each side. A fragment of one of these heads has the crossed fangs. The vessel is of a type found in the Coast Tiahuanaco periods.

3 Miscellaneous black, white-on-orange fragments, one representing a flat handle, one a bird head, and one with grooves

1 Partially complete orangeware figurine, 8 centimeters high, 2.6 centimeters wide at the head, and

about 1.5 centimeters thick. It represents a solid female figure, with separated legs, and two hands on the chest.

#### THE GALLERY COLLECTION

Only ten fragments were found in the gallery, but all of these are consistent with the Recuay materials found in the other galleries.

- 2 Fragments of plain brownware
- 3 Fragments of straight, orangeware trumpets
- 5 Fragments of black-white-red negativeware, all with segments of complex designs of Recuay type

On the basis of this site, it is clear that the mixed Tiahuanacoid style of the deep tombs is more recent in time than the Recuay style.

#### OBSERVATIONS ON THE WILKAWAIN REGION

In the preceding pages the collections from the Wilkawain region excavations have been described. An attempt to organize the miscellaneous materials follows, although with complete awareness that in many cases the final evidence is lacking.

In terms of the ceramic collections, there are five major and four minor sections to be considered.

1. Sites 7H-1, 2, 3, 4. The materials from the four deep stone-lined tombs are considered as a unit, representing a single time period. No positive association of ceramics with building units, outside of the tombs themselves, is possible, although the masonry suggests that of the temples.

2. Site 6H-2. The house refuse collection from one of the above-ground stone house sites. Included with this is the material from one grave, which, while intrusive, is not too distinct from the rest of the materials.

3. Site 7H-5A. A collection from a four-room above-ground stone house site, interesting for its stratigraphic position above a subterranean gallery.

4. Site 9H-2. A mixed collection from a subterranean house site.

5. Subterranean Galleries. A collection from nine galleries of Recuay style, treated here as a unit.

a. Site 7H-15. A collection from an unlined grave representing a white-on-red style.

b. Site 6H-3A, 3B. Materials from two box graves.

c. Site 8H-1. Bowls from an unlined grave.

d. Site 7H-7. A bowl from a box grave.

A comparison of grave and refuse material presents a difficult problem, further complicated by the fact that much of the grave material from the subterranean galleries and the deep stone-lined tombs is incomplete. Consequently, the calculation of a straight percentage of occurrences for comparative purposes becomes difficult in that sherd units versus complete or partially complete vessel are not equivalents. It seems advisable, therefore, to base the comparison on the presence or absence of certain selected diagnostics. This method has its weaknesses, as will be apparent, but is certainly better than forcing categories for statistical purposes.

The collection from the subterranean galleries is consistent, representing the Classic Recuay style. It is probably the earliest material found in the excavations. In Sites 7H-5A and 5B the house site material was found superimposed on a subterranean gallery. Furthermore, the Recuay style, as represented by the galleries, shows virtually no connection with the other collections. Possible exceptions are the straight clay trumpets and the rare occurrence of conical handles. Both of these are found in the mixed collection from the subterranean house site, 9H-2, but without positive proof that they should be considered contemporaneous with the rest of the refuse. The plan and type of construction of the galleries, with the slab walls and covers, are distinct from other architectural features in the region. Actually Recuay style was not found in any other association.

#### SITE 7H-15

The thirteen vessels from the unlined grave serve to isolate the white-on-red style. This is the only design style represented in the collection, appearing on eight of the vessels, while the remainder are plain brown or redware. The style is nicely isolated in this grave, but little evidence is presented for its relative position. While not identical in every detail, the shapes, designs, general carelessness of workmanship, and colors seem related to the white-on-red style at Chancay and at Chavín. At Chancay the white-on-red style is definitely pre-Coast Tiahuanaco, as shown by the work of Uhle and Kroeber<sup>1</sup> and as confirmed by the 1941 excavations of Gordon Willey. At Chavín the white-on-red style appears in intrusive graves of definitely post-

<sup>1</sup> Kroeber, 1926, 291.

Chavín period. The recent work of Larco (1941) in the Chicama Valley suggests that a related white-on-red style may be pre-Early Chimu at Salinar, although more evidence is necessary to prove this. The total effect of this evidence is to place the white-on-red style of Grave 7H-15 in a relatively early position, at least pre-Tiahuanacoid Middle period. What would be its relationship to the Recuay material is not answerable at this time. The only possible evidence comes from the mixed Site 9H-2, and this

is not too satisfactory. Consequently, for the time being, the white-on-red style is placed between Recuay and the definitely Middle periods.

#### MIDDLE PERIOD COLLECTIONS

The remaining four large collections are not as easily disposed of as that from the galleries. None except 9H-2 shows any positive connection with the Recuay style, nor any trace of Chavín influence. Furthermore, no definite Incaic influence can be noted. On the other

#### WILKAWAIN MIDDLE PERIOD SITES

Category	Sites 7H-1-4		Site 6H-2		Site 7H-5A		Site 9H-2	
	Complete	Frag-mentary	Complete	Frag-mentary	Complete	Frag-mentary	Complete	Frag-mentary
1 Orangeware . . . . .	2	1053		198	1	103	1	624
2 Brownware . . . . .		94				7		
3 Blackware . . . . .	14	134		32		16		7
4 Redware . . . . .	4	460	2	1		10		90
5 Two-color negative . . . .	2	207	1		1	4		1
6 One-color positive . . . .	1	86		26				56
7 Two-color positive . . . .	3	134		167		7	3	8
							(all specials)	
8 Three-color positive . . . .	1	32		10				
9 Toy vessels . . . . .	25		14		7			
10 Shallow plates . . . . .	5	93						16
11 Large plates . . . . .	2							
12 Annular-base plates . . . .		5		35				
13 Goblets . . . . .	3	15		7				4
14 Flask shape . . . . .	1	8				4		
15 Face-collar vessel . . . . .	1	35						
16 Constricted-collar . . . .	4	678		16				82
17 Double-spout . . . . .	5	21	2	37		1		
18 Double-bowl . . . . .	1		1	19				
19 Tripod plate . . . . .		5		24	1	1?		
20 Sieves . . . . .	1	9		22				
21 Modeled puma bowl . . . .		31		1				
22 Straight spoon . . . . .	3			7				
23 Thick black, white-on-red .		32		118				
24 Tiahuanacoid designed . .	5	50		43		8		
25 Open round-base bowl . . .		13					1	2
26 Flaring-sided cup . . . . .		3				3?		9
27 Cursive-design spoon . . . .	1							8
28 Loop-handle spoon . . . . .	1						1	1
29 Pressed-relief design . . . .				8		9		
30 White-on-redware . . . . .		3						11
31 Conical handle . . . . .				1		1?		2
32 Annular-base bowls . . . .							3	1
33 Straight clay trumpet . . . .								23
34 Brown-red, orange-on-gray-ware . . . . .							3	1
35 Grayware . . . . .								19

hand, three of the collections are definitely comparable, in spite of certain local differences, with the Middle periods as represented on the coast of Peru. In the accompanying table a comparison of the four major collections (Sites 7H-1-4, 6H-2, 7H-5A, 9H-2) is made in terms of 35 diagnostics. A discussion of this table follows, starting with the deep grave collection.

#### DEEP-TOMB COLLECTION

Since there is no question as to the contemporaneity of the styles represented, the collection from the four deep-tombs forms a basic unit. In the table, the first 24 diagnostics are typical. The position of the collection in the general Peruvian framework of Middle periods is quite evident, as mentioned previously. The combination includes blackware; redware; painting in one, two, and three colors on a red or orange slip base; the particular color combinations emphasizing black, white, and red; the Tiahuanacoid designs plus other influence, as depicted by shapes and colors. All is consistent with Coast Middle periods, particularly as represented by Middle Ancon I and related styles. Obviously the correspondence is not absolute. Not only are some Coast characteristics lacking, but two-color negativeware, tripod plates, sieves, toys, painted spoons, and other details are added. In total, the collection presents a sharp contrast to the Recuay style as found in the subterranean galleries. Considering the Recuay style as "early" for the Wilkawain excavations and the deep-tomb style as "middle," one is impressed by the gap which separates the two and emphasizes the coastal parallels.

#### HOUSE SITE 6H-2

The house site refuse and the three vessels from the intrusive grave are treated as a single unit in the comparative table. While this material is essentially refuse, the close relationship to the deep-tomb collection is none the less apparent. Of the 24 diagnostics which distinguish the deep-tomb style, nineteen are likewise characteristic of the house site collection. It is true that the redware and two-color negativeware are represented by the intrusive grave pieces only, but otherwise the characteristics of the deep-tomb style which were comparable with coastal Middle periods are all found in the house site refuse. Furthermore, no new style

suggesting any major change is added in the house site collection, but rather, the U-shaped thick black, white-on-red bowls and the pressed blackware design technique are further confirmation of the Coast Middle period relationship. In final analysis, it seems impossible to differentiate the two collections in any but insignificant detail. Even if the three pieces in the intrusive grave were given exaggerated importance, the only significance achieved would be to place the refuse collection as slightly earlier than that from the deep-tombs, but still well within the generalized Middle period.

#### HOUSE SITE 7H-5A

The material from the four-room house site is difficult to use for comparison because of its relatively small quantity. Even so, it presents no startling differences from either of the other two collections under discussion. Eleven of the deep-tomb characteristics are found and likewise ten of the significant features of house site 6H-2. The one large fragment of incised brownware has a design more clearly Tiahuanacoid in style than any piece from the other two collections.

#### SUBTERRANEAN HOUSE SITE 9H-2

It has already been emphasized that this collection may not represent a contemporaneous unit. None the less, it seems to fall roughly into the Middle period category by virtue of the absence of any typical Early material, as represented by Recuay style, or of any positive Late material, as represented by Inca style. However, the comparative table emphasizes the differences between the main body of the subterranean house collection and those from the other three Middle sites. Thus, while orange-ware, blackware, and redware are still present, a number of significant characteristics are lacking. These include negative painting; positive painting in more than one color on a base slip (there are three complete and eight fragments of two-color, but all of these are special styles which do not correspond to the other sites); tripods; toys; sieves; annular base plates; and, most important of all, the majority of the characteristics suggesting Tiahuanacoid influences. Actually this collection contains neither the colors, shapes, nor the design elements which were used in the other three collections as indicators of Tiahuanacoid affiliations. Of the 24

characteristics of the deep-tomb collection, only seven are found in the subterranean house collection, and these are the least distinctive ones.

The subterranean house collections add certain new styles not found in the other collections. Most distinctive is a grayware pottery with design in brownish-red on a light orange band over the gray base. This style is associated, furthermore, with two new shapes, namely, an annular-base open-bowl and an annular-base cup. The cursive-style spoons are more frequent in this collection, although one was found in the deep-tomb collection. White-on-red style fragments of the type isolated in the grave of Site 7H-15 are represented here, while only three dubious fragments appear in the other collections.

While it is easy to establish the differences between the subterranean house site material and the other three sites, the relative chronological position of the two groups is more difficult. In spite of the lack of typical Recuay material, it has already been pointed out the straight trumpets, conical handles, three-color negative, and slightly modeled red-on-white-ware are all found in Recuay collections, and are lacking in the other Wilkawain Middle period sites. The presence of white-on-redware would, by the previous argument, also suggest a slightly pre-Middle position. Without insisting that all styles in this collection are contemporaneous, or that further evidence will not affect the analysis, the materials from Site 9H-2 are here considered as slightly earlier than the Tiahuanacoid-influenced collections from other Wilkawain sites.

#### SMALL GRAVE COLLECTIONS

The material from the four graves can be treated briefly, since obviously it is insufficient in quantity to affect deeply the interpretations based on the large collections.

Site 8H-1. The modeled puma bowl and the orange olla with pressed-relief design, found in an unlined grave, quite obviously fit into the general group represented by the deep-tomb collection. If anything, this grave serves further to unite the deep-tomb collection with that from the above-ground house sites, since it combines pressed-relief (absent in the deep-tomb) with the painted and modeled puma (characteristic of the deep-tomb). Furthermore, both pieces are typical of Coast Tiahuanaco sites.

Site 6H-3A, 3B. The nine vessels from these two stone-lined box graves are consistent with the collection from the deep-tombs and from the above-ground house sites in shape, colors, and designs.

Site 7H-7. The single brownware incised bowl from a stone box grave is left in its unique position. Not only is it a distinct style from that of any other piece found, but absolutely no evidence is available for even the suggestion of a relative time position.

#### RÉSUMÉ

1. Recuay Style (Sites 7H-5B, 7H-8, 7H-10, 7H-12, 7H-13, 7H-14, 7H-16, 10H-1, 10H-2). It is associated with subterranean galleries and is demonstrably earlier than the Wilkawain Tiahuanacoid style.

2. White-on-red Style (Sites 7H-15, 9H-2). Although isolated in one grave and also represented in the mixed collection from the subterranean house, the tentative chronological position is, by analogy, with the style in other Highland and Coast sites.

3. Subterranean House Mixture (Site 9H-2). While the materials are probably not contemporaneous, a position between Recuay and Wilkawain Tiahuanaco is indicated by some slight Recuay resemblances, the presence of the white-on-red style, and the absence of Tiahuanacoid influences and of those of still later periods. The new style of reddish-brown, orange-on-grayware is distinct in color, design, and shapes of vessels, and quite possibly represents a later intrusion.

4. Wilkawain Tiahuanacoid Style (Sites 6H-2, 6H-3A, 6H-3B, 7H-1, 7H-2, 7H-3, 7H-4, 7H-5A, 8H-1). It is well isolated by its association in the deep stone-lined tombs with slab covers, in stone box graves, in unlined graves, and in the above-ground house sites of one to four rooms. The architecture of the house sites and graves also suggests the association of the three-storied temples. If this is true still another characteristic can be added, namely, carved stone puma heads with tenons for wall insertion. The closest affiliations of the style are with Coast Tiahuanaco periods such as the Epigone at Pachacamac, Middle Ancon I, and the Supe Epigonal.

5. Late period materials were not found in the Wilkawain region excavation.

## OTHER SITES NEAR HUARAZ

Sites in the Huaraz region have already been listed. Aside from the Wilkawain section, three other sites near the pueblo of Huaraz deserve more detailed attention because of the excavations carried out.

## SHANKAIYAN, SITE 1H

In the fields on this hill near Huaraz three subterranean galleries were visible, and more were reported as previously opened. One measured 4 meters long, 82 centimeters wide, and 1 meter deep with the cover-stones just under the surface. The side walls were formed of three large slabs each, with the intervening cracks filled with small stones. At each end was a large upright slab, and four more formed the roof. No evidence of an entrance was seen.

## SITE 1H-A

A subterranean gallery 5.6 meters long, 1.05 meters wide, and 1 meter deep to the packed clay floor had three covering slabs at the north half starting 10 centimeters below the ground surface. This north half had apparently been excavated previously. The south half was filled with dirt and house refuse *débris*, but without any trace of covering slabs. Excavation in this south half produced one small complete vessel and 570 sherds. No bones or other indication of burial were found, nor is the material of the grave ceramic type. On the other hand, the open stone-lined gallery does not seem impressive as a dwelling.

## Materials from Gallery 1H-A

The materials from this gallery can be described briefly in terms of wares, with indications of the shapes represented.

Orangeware, 1 complete, 265 fragments. All pieces are rather thick, crude orangeware without slip or painted decoration.

## 249 Fragments of olla types

## 215 Plain body fragments

10 Base pieces showing five rounded and five flat bases

18 Rim pieces indicating flare-rims in 13, and flare plus a high collar in five. Five of these have shoulder nubbins either plain or oval with groove (Fig. 18e).

2 Rims of somewhat constricted neck ollas

4 Short vertical rims of ollas with horizontal flat-loop handles

3 Fragments of shallow plates

3 Fragments of convex-sided open-bowls (Recuay A variant)

4 Pieces of round-loop handles

4 Pieces of conical handles of Recuay B vessels

1 Complete orange open-bowl, 7.5 centimeters in rim diameter and 3 centimeters deep, with two bulges on the body (Fig. 17h)

2 Miscellaneous fragments, one representing crossed arms, and one decorated with simple incision

Thin orangeware, 43 fragments. An orangeware like the above, but much thinner and possibly once decorated with painted design, although no traces are visible on these pieces.

24 Miscellaneous body pieces, including one flat base

8 Rim pieces of an open-bowl with straight diverging sides

5 Pieces of a vessel with constricted cylindrical neck

6 Fragments of straight clay trumpets with flaring mouthpieces (Fig. 18d, i)

Plainware, 7 fragments.

Redware, 4 fragments. A thin polished redware including a rounded base fragment, two straight rim pieces, and a body piece.

Whiteware, 44 fragments. All pieces are of white clay and quite probably were once part of negative painted vessels. As it is, the pieces included here show no remains of painted design.

## 36 Miscellaneous body pieces

1 Piece of flat base with vertical sides

4 Fragments of large flat rims of Recuay G type

1 Body fragment with elongated wing lug

2 Pieces of flare-collars

Two-color negative, 1 fragment. One black-orange negative piece was from a shallow open-bowl (Fig. 18c).

Three-color negative, 27 fragments. All pieces are black-white negative plus the addition of red. The base clay is in all cases whiteware. All are typical of Recuay style.

## 8 Miscellaneous body fragments

11 Pieces of one modeled figure with a complex geometric design on both sides (Fig. 18a). The figure,

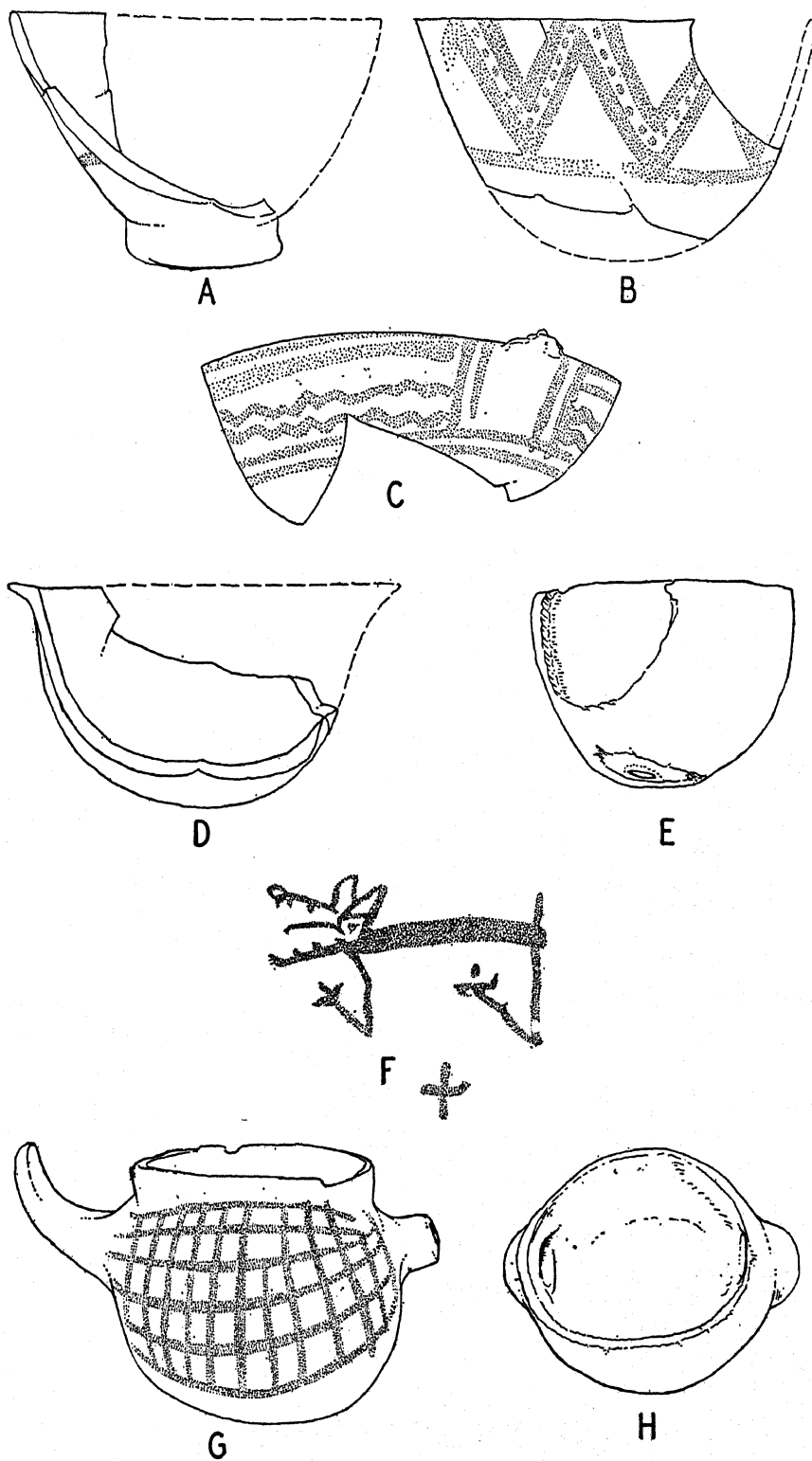


FIG. 17. Recuay style artifacts from gallery at Shankaiyan.



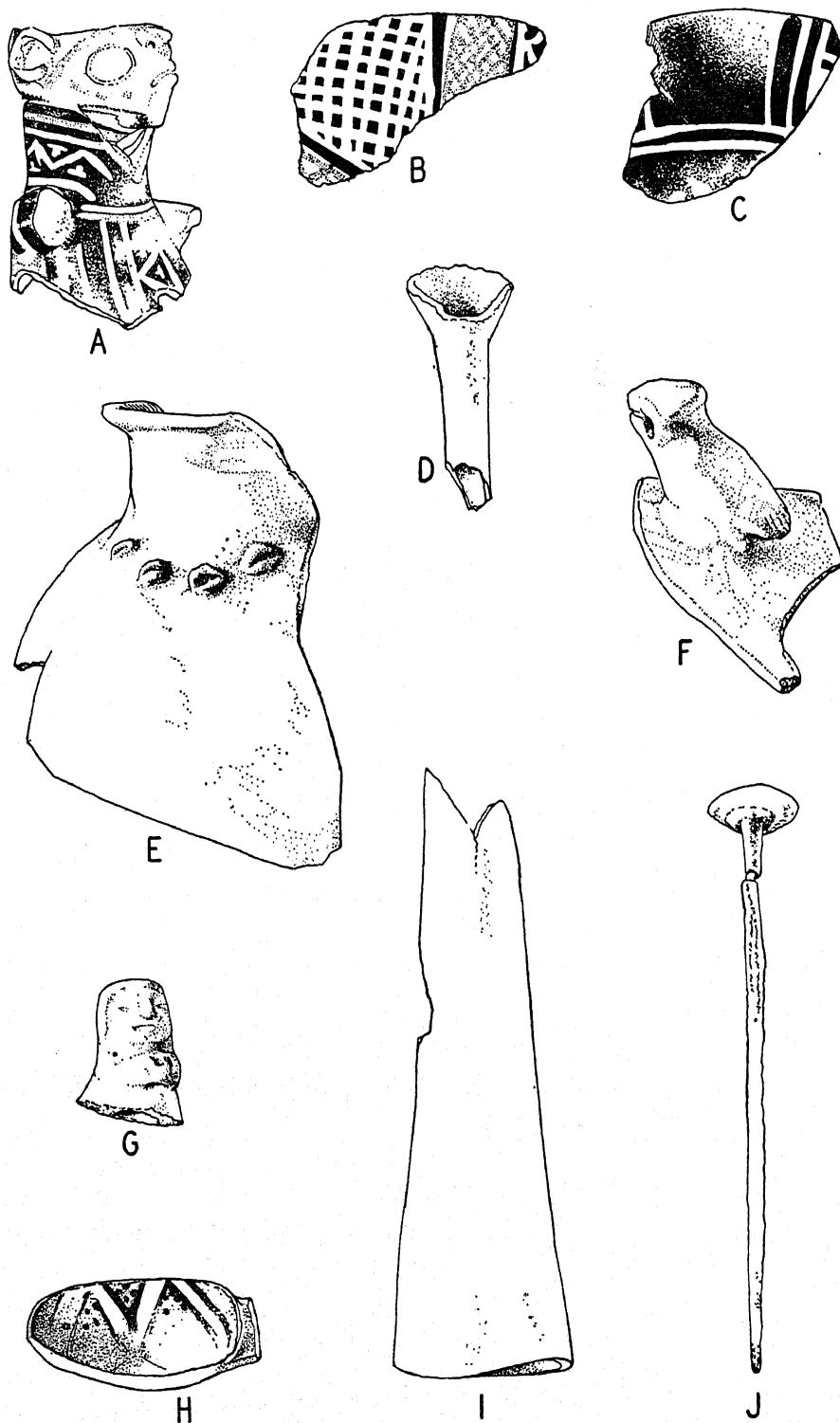


FIG. 18. Recuay style artifacts from gallery at Shankaiyan.

while incomplete, seems to be the central one of a group on a flat-topped vessel of Recuay J style.

2 Pieces of a flat-topped vessel with a cut-out opening behind, and two modeled birds in front (Fig. 18f)

1 Body fragment with a short projecting spout

3 Pieces of a long wing lug with simple triangular designs

1 Piece of an open-bowl with line and dot design

1 Head disc of a modeled figure

White slip on orange clay, 87 fragments. Orangeware fragments are covered with a thin white slip. Apparently in some vessels the slip does not cover the entire body, but rather outlines a simple design.

72 Body fragments of olla-like vessels, including one flare-rim and five rounded base pieces

2 Fragments of angular-bodied vessels

5 Pieces of open, convex-sided bowls

6 Fragments of decorative bulges on body pieces

1 Constricted cylindrical neck piece

1 Piece of headdress of modeled figure

Black-on-orange, 9 fragments. Seven pieces are from one round-bottom open-bowl with three parallel black lines, and two are body fragments.

Red-on-orange, 37 fragments. Most of these are miscellaneous body pieces (30) with red lines or wide bands on an orange clay. Besides the body fragments the following can be noted:

1 Piece of horizontal loop handle, rounded

1 Flare constricted-collar

1 Piece of flare-rim

4 Rims of open convex-sided bowls, three of which were painted inside

Red-on-white, 18 fragments. An orange clay is covered with a white slip on which a design of red lines or bands is imposed.

11 Pieces of flare-rim bowls, including two rim fragments

6 Pieces of two open-bowls of Recuay A-1 style. One is decorated with a wide line forming an angular scroll, and the other with bands crossing each other.

1 Body piece with a short tubular spout and simple red line design

Red-on-white, 24 fragments. A base white clay is decorated with wide red lines or bands. Most of the pieces are from open-bowls.

10 Body pieces probably from shallow open-bowls. Three are painted inside with parallel bands; two are painted outside with band and wavy line (Fig. 17c). The other five have linear designs.

1 Fragment of an annular base open-bowl of Recuay A-2 style with linear design (Fig. 17a)

3 Fragments of an open-bowl (Recuay A-1) with crossing red bands. Five fragments of a similar bowl with zigzag bands (Fig. 17b). Three fragments of a similar bowl with fret-like rim lug, and decoration of horizontal lines and wavy lines.

1 Piece of a somewhat irregular open-bowl (Fig. 17d)

1 Fragment of a rounded handle

Black-white-red, 3 fragments. Three small modeled figures are painted in black-white-red (Fig. 18g). All are of a type found on flat top vessels of Recuay J style.

Spoons, 1 fragment. One bowl of an elongated clay spoon with a flat handle is painted in black and red on an orange clay (Fig. 18h).

Metal artifacts, six pieces. Six copper pieces were found, including a needle 8.7 centimeters long; a pin with a nail-head top (Fig. 18j); a fragment of a disc; a 5-centimeter long rounded bar hammered flat at each end; a flat arm, 5 centimeters long, ending in a hand with the middle finger curled over; and a flat bell-shaped knife, 3.8 centimeters wide at the blade and 5.7 centimeters long.

The collection as a whole shows obvious affiliations with Recuay style, in spite of some variants. The discussion is reserved to follow the description of the second subterranean gallery excavated.

#### SITE 1H-B

About 3.4 meters west of the above-described gallery was found another which had not been previously disturbed. It was 3 meters long in total, from 75 to 85 centimeters wide, and 75 centimeters deep to the clay floor. The cover-stones were about 35 centimeters below the ground surface, and the spaces between the slabs were filled with smaller stones. The side walls were built of small and large stones, not as well matched as in other galleries. The groundplan is in the form of two rectangular sections which form an angle. Fifty fragments and five complete or restorable bowls were found but no bones nor other indication of burial.

## Materials from Gallery 1H-B

Plainwares, 31 fragments. These include seven crude orange from olla bodies; seven thin orange, six from globular vessels and one a flat base with two feet lugs; nine orange clay with red slip from the flat base of one globular vessel; two redware pieces, one a flat handle; and six whiteware, including a flare-rim, a cylindrical neck, three body pieces, and a section of a modeled vessel.

Three-color negative, 4 fragments. One piece is from the wide flat rim of a Recuay G style vessel; one is a modeled body spout; and two are body fragments.

White slip-on-orange, 1 complete (Pl. 2d). A conical-handled vessel of Recuay B-2 style with slightly flaring rim and short tubular spout. The body of the vessel is 10 centimeters in diameter, 8.3 centimeters at the rim, and 7.5 centimeters high. The handle is solid, 5.5 centimeters long and 3 centimeters at the base. The spout is 1.5 centimeters in diameter and projects for 1.7 centimeters. Traces of white slip are the only signs of decoration on the orange clay.

Red-on-orange, 2 complete, 7 fragments:

1 Complete shallow open-bowl, 15 centimeters in rim diameter and 4.5 centimeters deep, with sets of short parallel red lines around the outside of the rim on the orange clay

1 Complete bowl of a dipper (Recuay B-4 style) with the handle missing (Fig. 17e). The design is on the inside of the bowl and consists of a simple cross, plus two stylized jaguars (Fig. 17f).

3 Pieces of one open-bowl of Recuay A-1 style with parallel red lines around the outside near the rim

2 Pieces of a globular bowl with flare-rim

2 Miscellaneous body pieces

Red-on-white, 2 complete, 8 fragments:

1 Complete conical-handled bowl of Recuay B-2 style (Fig. 17g). The bowl is 9 centimeters in diameter and 8.5 centimeters deep, with a flare-rim, a curled-up conical handle, and a short tubular spout. The design is in cross-hatch lines of reddish-brown on the white clay.

1 Restorable dipper-bowl (Recuay B-3 style) with red bands on the white clay. The handle of this vessel was found just above the cover-stones and the body pieces inside.

3 Pieces of an open-bowl with fret-like rim lugs

and design of groups of parallel lines. Two pieces of a similar vessel with more convex sides, and with a design consisting of straight and wavy horizontal lines. Two pieces of a similar vessel with linear decoration both inside and out.

1 Flat top of a vessel with the bases for two modeled figures and traces of red paint

Metal artifacts, two complete. Two copper pieces were found, one a needle 7.5 centimeters long, and the other a long pin with a flat disc, nail-top head. The pin is 19.2 centimeters long and the head is 3.5 centimeters in diameter.

## SITES 1H-C, 1H-D

Two stone box graves were found, one 55 by 45 centimeters by 1.1 meters deep, covered by two large stones. The other was 50 by 50 centimeters and 58 centimeters deep, without cover-stone. Both contained fragments of infant burials.

## SHAPES REPRESENTED IN SHANKAIYAN GALLERIES

Shape	Site 1H-A		Site 1H-B	
	Complete	Fragment	Complete	Fragment
(Recuay A-1) . . . .		12		3
(Recuay A-2) . . . .		1		
(Recuay A, variants) .	1	35	1	7
(Recuay B-2) . . . .			2	
(Recuay B-3) . . . .			1	
(Recuay B-4) . . . .			1	
Conical handles . . . .		4		
(Recuay G) . . . . .		4		1
(Recuay J) . . . . .		14		1
(Recuay O-2) . . . .		6		
Shallow plate . . . .		3		
Cylindrical neck . . .		7		1
Body spout . . . . .		2		1
Wing lug on body . . .		1		
Base fragments . . . .		17		9
Body fragments . . . .		397		21
Angular body . . . . .		4		
Wide flare-rim of olla .		20		3
Constricted flare collar		6		
Straight olla rim . . .		4		
Modeled . . . . .		8		2
Round handle . . . . .		6		
Spoon . . . . .		1		
Miscellaneous . . . . .		18		1
Totals . . . . .	1	570	5	50

## RECUAY STYLES FROM GALLERIES

Shankaiyan							Wilkawain		
Ware	Sita 1H-A			Site 1H-B			All Galleries		
	Complete	Fragments		Complete	Fragments		Complete	Fragments	
		No.	Per Cent		No.	Per Cent		No.	Per Cent
Crude orange . . . .	1	265	46.49		7	14		91	34.08
Thin orange . . . .		43	7.54		7	14			
Redware . . . . .		4	.70		11	22			
Brownware . . . . .								28	10.49
Plain . . . . .		7	1.23						
White . . . . .		44	7.72		6	12		1	.37
Two-color negative .		1	.18				1	9	3.37
Three-color negative.		27	4.74		4	8		78	29.22
White slip-on-orange.		87	15.26	1					
Black-on-orange. . .		9	1.58						
Red-on-orange . . .		37	6.49	2	7	14	1	14	5.24
Red-on-white slip . .		18	3.16					38	14.23
Red-on-white clay. .		24	4.21	2	8	16	1		
Red-on-gray . . . .							1		
White-on-red . . . .							2		
Red-and-white . . .								4	1.50
Black outside, red in- side . . . . .								2	.75
Black, red-on-orange.		1	.17						
Black-white-red posi- tive . . . . .		3	.53					2	.75
Totals . . . . .	1	570	(100)	5	50	(100)	6	267	(100)

## OBSERVATIONS ON THE SHANKAIYAN GALLERY COLLECTION

The affiliations of the pottery from both the Shankaiyan galleries are undoubtedly with Recuay style, by virtue of colors, negative painting, shapes, and some designs. At the same time Shankaiyan presents a great quantity of utilitarian material not ordinarily found in Recuay collections. This contrast holds not only for the selected display material of most collections, but also for the material from the nine galleries of Wilkawain. Plainwares are rare in the Wilkawain galleries. The total number of pieces, 119, actually includes 88 fragments of orange and brown straight trumpets which, if eliminated, would make the contrast with Shankaiyan more striking. Most of the shapes

represented in the Wilkawain collection can be matched in the various Recuay collections. The shapes from Shankaiyan, on the other hand, present variants and styles not ordinarily associated with Recuay. None of these variants, however, suggest closer affiliation with any of the middle styles of the Wilkawain region. Still no Tiahuanacoid influences are seen, nor any other direct tie-up with Middle periods. Thus, for lack of further evidence, the Shankaiyan collections are considered as a sample of refuse site material of general Recuay style.

## SAN JERÓNIMO, SITE 2H

On the hill just across the Santa River from Huaraz, a surface collection of sherds was made, although no excavation was carried out. A cata-

logue list of these sherds is included here. The variety of colors, their combination, the geometric design, the habit of using different color schemes on the inside and outside of vessels, the hard firing, and the few suggestions of shapes, all seem to indicate an essentially Incaic affiliation for most of these pieces. (See Fig. 31a-p for style.)

7 Orange slip, inside and outside, including four body, one lug, one flat handle, one incised piece

3 Blackware pieces

1 Redware, unpolished flare-rim

7 Red polished slip on orange clay, including two rims of open-bowls, two thick rims with angular ledge, two base and one body fragments

1 Yellow clay rim of large vessel

3 Brownware, one with grooved nubbin, one incised, and one with stipple

1 Grayware section with two raised ridges

4 White line on red slip, including a rim and two body pieces with linear design and a collar base with band design

2 Black-on-red slip, one linear and one disc design

14 White-cream clay, inside and outside, with seven rims of open-bowls, two flare-rims, and five body pieces

14 White outside, orange inside, with two open-bowl rims, one flare-rim, and eleven body pieces

7 Orange outside, white inside, body pieces

3 Orange outside, red inside

6 Red-on-white outside, white inside; with four rims from open-bowls and two body fragments. Three have parallel horizontal lines, one a line and triangle, one a band, one angular lines.

3 Orange-on-white outside, white inside, all linear with two open-bowl rims, one body piece

4 Black-on-orange outside, orange inside, all linear with one open-bowl rim and three body pieces

1 Black-on-orange outside, red inside, with parallel lines on open-bowl rim

3 Black-on-orange outside, white inside with one diamond and two linear designs; two open-bowl rims, one body piece

5 Black-on-white outside, reddish-orange inside; three rim and two body pieces; two horizontal parallel lines and one vertical, and two semi-curved designs

6 Black-on-white outside, white inside; four rim and two body; four horizontal parallel lines, one square and dot, and one band design

1 Red, orange-on-white outside, red inside with band design

13 Black and red-on-white outside, white inside; five rim, one base, seven body; four horizontal parallel lines, two vertical parallel lines, one disc, two line and circle, one hook, three complex geometric designs

1 Black, red-on-white outside, orange inside; a rim piece with horizontal parallel lines

2 Black, red-on-orange outside, white inside; a rim and a body piece with linear design

2 Black, red-on-orange outside, orange inside; a rim and a body piece with linear design

1 Reddish-brown, white, black, yellow on outside, white inside; body piece with horizontal and vertical stripe design

1 Red-on-orange spoon fragment with round handle

#### AYAPAMPA, SITE 5H

On this ridge, some 5 miles east of Huaraz, a number of above-ground houses, commonly called *chullpas*, were examined. All correspond to one type of house and vary only in details. A description of one house is sufficient for the group. One *chullpa* (Fig. 19), then, was rectangular, measuring 1.85 by 1.9 meters on the outside and standing some 1.35 meters high. It contained only one room, without subdivisions, niches, projecting stones, or other interior modification. A doorway to the east measured 50 by 50 centimeters and was topped with a single stone lintel. The roof was formed of one long stone laid across the north and south walls at the center. Shorter stones were laid with one end on this center ridge and the other on the east and west walls. The slightly gabled effect thus produced was obscured by a heap of dirt and small stones which covered the roofing beams and gave a dome-shaped appearance to the whole roof. The walls of the *chullpa* were composed of rough stone, both large and small stones being utilized but with little plan. Mud or clay was used as a cement.

Other houses vary in size. Some are placed on large natural boulders. Some have low enclosure walls surrounding them, or low platforms along an outside wall. These differences can be briefly tabulated.

House 1. (Described above as type.)

House 2. A one-room, rectangular house, 1.7 by 2.25 meters and 1.80 meters high. The

door is at the south and 55 by 75 centimeters. Along the west side is a platform 1.45 meters wide and 50 centimeters high.

House 3. A house 1.85 by 2.7 meters and 1.3 meters high, with a small doorway at the east.

House 4. A house 1.9 by 1.8 meters and 1.9 meters high. The doorway at the east is 80 by 60 centimeters. A platform 1.1 meters wide is on each side of the house.

House 5. A house 3.4 by 2.1 meters and 2.2 meters high. The doorway at the south is 50 by 75 centimeters. About 3 meters away from the house on all sides is an enclosure wall made of a single row of stones set on edge.

House 6. A house 2.6 by 2.4 meters and 2.2 meters high, with a south doorway, 50 by 50 centimeters.

House 7. A house 2.6 by 2.9 meters with the door at the east and a side platform.

House 8. A fallen house 2.2 by 2.5 meters, with door at the east.

House 9. A house 2.4 by 2.75 meters and 2.3 meters high. The door, 55 by 60 centimeters, is at the east. A platform 50 centimeters wide and 25 centimeters high is on all sides.

House 10. A fallen house 4 by 3.5 meters.

Other houses in the region were seen, but not measured. Six were noted as badly destroyed, and about nineteen others were noted briefly. Miscellaneous terraces, platforms and uprights were also seen in the region of Ayapampa. One upright stone stood in the center of a stone platform, 4.1 by 2.2 meters. It measured 80 by 50 centimeters and 1.8 meters high. Two other uprights were placed 1.4 meters apart on a platform 6.5 meters long. Still another 60 by 60 centimeters and 1.6 meters high stood on a platform 1.3 by 2.1 meters. The purpose of the uprights was not clear.

One house, No. 11, was partially cleared out. It rested on a large natural boulder and measured 1.65 by 1.27 meters and 1.3 meters high. The roof had fallen in and the doorways were completely covered. Excavation along the floor uncovered two flexed skeletons and eight small vessels:

1 Orangeware jar with a straight-collar with simple relief face, and two flat-loop body handles. It is 7.5 centimeters in diameter and 12 centimeters high.

1 Blackware pitcher with constricted-collar and

wide flat handle from rim to body. It is 7 centimeters in body diameter, 4 in rim diameter, and 9.5 centimeters high.

1 Redware shallow plate, 8 centimeters in diameter by 3 deep

1 Redware open-bowl, 6 centimeters in diameter and 2 centimeters deep

2 Shallow tripod redware plates, about 9 centimeters in diameter and 4 centimeters high

1 Small orangeware sieve, 8 centimeters in diameter by 3 deep

1 Toy orange olla with two loop handles

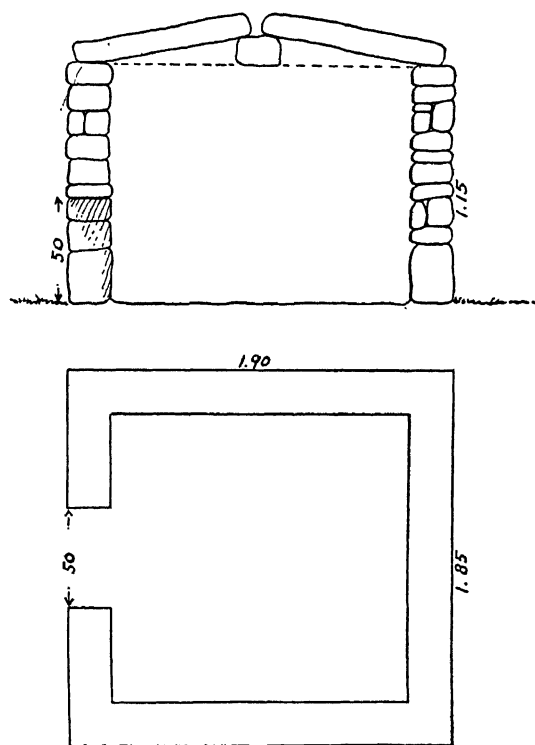


FIG. 19. Groundplan and cross-section of house at Ayapampa.

While the data on this burial are not adequate enough for any sound conclusions, the material certainly resembles that described for the Tiahuanacoid Middle period at Wilkawain, as represented by the deep-tomb collection. In spite of this one burial, it does not seem likely that the houses were constructed for that purpose. All the others examined disclosed no burial remains, nor any sign of having been deliberately sealed up.

## THE CARHUAZ REGION

Our work in the Carhuaz region was limited to an examination of the ruins at Copa Chica and the neighboring hacienda of Copa Grande. Much excavation has been done on these two haciendas which, although nothing has been published, is represented by the private collec-

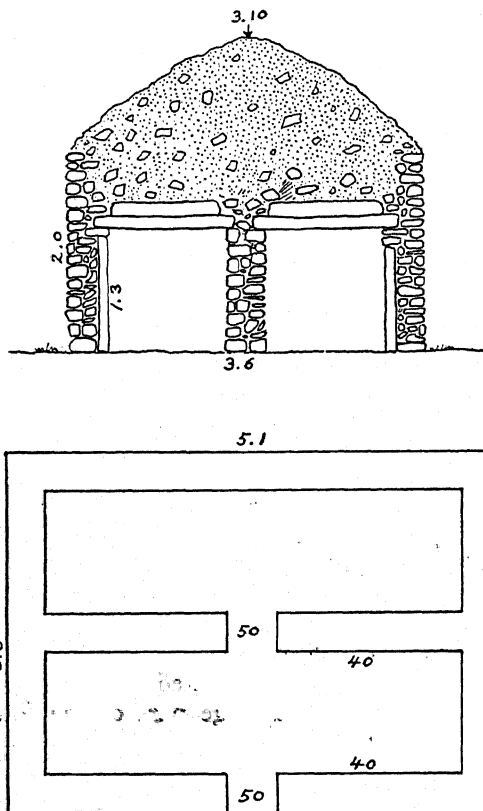


FIG. 20. Groundplan and cross-section of house at Copa Chica, Carhuaz.

tion of Sr. Tomás La Rosa Sanchez and the collection in the Universidad de San Marcos assembled by Dr. Tello. The La Rosa Sanchez Collection contains numerous pieces of Recuay style pottery, as well as Tiahuanacoid pieces of the Santa type, and a few decadent Early Chimú types. All are said to have come from the ruins on Copa Chica hacienda. The Recuay style pieces were classified and will be discussed in a later section. The following descriptions refer to house structures at Copa Chica essentially and include a few notes on Copa Grande. The few days' excavation produced no further information on the ruins.

## COPA CHICA RUINS

The ruins occupy a long hill, above and northeast of the hacienda house. The glacial peaks of Yan-Raju and Huascarán form a background, and the fertile fields of the hacienda spread out below. The long ridge of the hill runs roughly north to south and is covered with ruins of houses, walls, terraces, and tombs. In the houses two definite construction types can be noted, and within these the structures are remarkably uniform. In general the constructions of Type B are concentrated on the knoll at the northern and highest end of the ridge, while those of Type A are distributed down the ridge and along the eastern slope (Pl. 4c).

## HOUSE TYPE A

Thirty-five house units were counted. Sixteen of these average 4 by 4.5 meters in groundplan measurements, with a range of 2.6 to 5.9 meters in width, and 3.3 to 6 meters in length. No one-room house was seen; two had four rooms and the rest had two rooms each. Some of these house units are actually combined to form a long house with two separate dwelling units, unconnected internally. The total of 35 house units treats such combinations as two distinct units. Other houses may form clusters, within a few meters of each other, but houses well isolated from each other are, if anything, more typical. In spite of some difference in measurements and the number of interior rooms, all the houses are constructed in more or less the same fashion. Thus the following description of one house unit may serve for all in Type A.

A typical Type A house measures 3.6 by 5.1 meters (Fig. 20). A doorway 50 by 56 centimeters, covered by a stone lintel, is at the center of the south side, although in general the orientation of the house or the door is not consistent. Within the house a lengthwise central partition divides the interior into two rooms. A door, similar to the outer one, connects the two rooms in the center. The resulting rooms are about 1.2 meters wide, 4.1 meters long, and 1.3 meters high. The rooms are covered by four to five flat slabs each, the ends of which rest on the central wall and are built into the outer walls. Above these slabs is piled as much as 2 meters of dirt and stones, held in place by building up the outer walls. No evidence of a second floor is seen, and this accumulation of dirt was evi-

dently intended as protection against the heavy rainfalls. Viewed from the end, the roof is slightly peaked. The outer walls are from 40 to 50 centimeters thick. The inner side utilizes large slabs with the chinks filled with small stones and mud. Small niches and projecting stones are frequently seen inside. The outside of the walls may employ the same slab technique, but more often alternating rows of large and small stones are seen. None of the stones is dressed, although selection and perhaps splitting are noted. The fact that many of these houses are intact today testifies to their excellent construction. Although bones were found in some, the houses were dwellings rather than burial places. Measurements on other houses of this type can be tabulated briefly:

House 1-2. Two adjoining room units, one 4.1 by 5.5 meters, the other 2.7 by 4.5 meters, both with doors at the east.

House 3. Two-room house, 3.6 by 4.7 meters, with door at the east. An oval wall surrounds the house.

House 4. Four-room house, 4.5 by 4.6 meters, with door at east.

House 5. Two-room house, 5.8 by 6.3 meters, with door at the north.

House 6. Described as type above.

House 7. Two-room house, 3.3 by 3.3 meters, with a south door.

House 8-9. Two adjoining two-room units, one 5.9 by 6 meters, with a door at the north and at the south, the other 5 by 5.1 meters, likewise with two doors. A step around the building is 40 centimeters wide, and a cornice projects around the roof.

House 10. A two-room house, 4.3 by 4.4 meters with the door at the north. The peaked end wall stands 1 meter high. About 3 meters away from the house is an enclosure wall.

House 11-12. Two adjoining two-room units, each 3.7 by 4.3 meters.

House 13-14. Two adjoining two-room units, each 3.2 by 3.3 meters.

House 15. Two-room house, 4 by 4.5 meters, with south door.

House 16. Two-room house, 2.6 by 4 meters, with south door.

House 17. Four-room house, 4.3 by 4.4 meters, with door at the east and an addition to the west 1.5 by 1.5 meters.

House 18. Two-room house, 3 by 4 meters, with south door.

Houses 19-35 seen, but not measured.

#### HOUSE TYPE B

The knoll at the north end of the ridge is covered by houses of an open type. Instead of being spread out as are Type A houses, these are close together, utilizing the same walls in many cases. A village plan is laid out in so far as the contour of the knoll permits. Rooms of these houses are of large size, one measuring 4.25 by 5.6 meters. The doors are ample; one measures 1.4 meters wide and 1.55 meters high and is covered with a lintel. The walls are over a meter thick and contain niches, but no windows. None of the rooms has any remains of a roof, implying that the roofs were once covered by perishable materials. Many houses and terraces were seen, and the whole knoll is surrounded by a wall still standing in parts, over 1 meter thick and from 2 to 3 meters high. Two stone gateways remain in this wall (Pl. 4b), one 1.35 meters wide and 1.95 meters high; the other 1.75 meters wide by 1.65 meters high. Both are covered by stone slabs. The house walls are built by placing stones of about the same size in irregular rows, while slabs are used only for door facings.

In spite of the contrast in the two types of houses, there is no good evidence to indicate relative antiquity. It is true that the general style and lay-out of the Type B houses suggest Inca building, but no ceramics were found which would confirm this.

Tombs have been excavated in many parts of this ridge, and a large part of the Rosa Sanchez Collection is supposed to have been found here. Our excavation encountered five stone box graves, but all without contents (Pl. 4a). One measured 30 by 50 centimeters and 30 centimeters deep, with the cover slab 80 centimeters below the surface. Otherwise even sherds were not encountered.

#### COPA GRANDE RUINS

Although some ten sites were reported for Copa Grande by the owners, Eliseo and Tomás Dextre, only a few were visited by us. One, called Jatun Allankay, was located along the top of a long narrow ridge. Terraces and open platforms were seen, as well as series of rooms without roofs. These were arranged along streets or passageways, had wide doorways, niches in the walls, and a construction of rough stone not arranged in files or rows. In total the style is similar to Type B at Copa Chica.



## THE KATAK-RECUAY REGION

Katak, the hacienda of Sr. Ludovico Cáceres, lies a few kilometers south of Ticapampa and Recuay in the upper Santa Valley. To the south extends the great Pampa de Lampas on which plains the Santa has its origin. Inca roads are reported for this swampy area. Our work here consisted of the examination of a dozen sites in the region of Katak and Recuay, and some minor excavations. While this region is famous as the center of Recuay style our work contributed little to clarify the problems relating to that period. We examined numerous subterranean constructions, possibly dwellings, and excavated one of these which furnished a small collection.

Most of the constructions in this area are subterranean. Tello has done considerable work in the region and has published a brief note.<sup>1</sup> Here he says that he counted 148 subterranean chambers in the Katak region alone, and notes that Don Agustín Icaza made the Recuay style collection which now forms part of the Macedo Collection in the Museum für Völkerkunde in Berlin. Tello, however, was puzzled like ourselves by the object of these chambers and by the actual association of materials. To quote:

The object of these buildings has not yet been satisfactorily ascertained. The natives affirm that bodies and ceramics have been extracted from them. Nevertheless, I have not found in Katak nor in the subterranean chambers of Gecosh, Castillopampa, or Wari-raxa, any of these archaeological elements.<sup>2</sup>

Thus far in this report several types of house sites have been mentioned. (Wilkawain: above-ground houses of one and two floors; three-floor temples; subterranean one-room houses under large natural rocks; subterranean galleries. Ayapampa: one-room above-ground houses, with slightly gabled stone roofs. Copa Chica two- to four-room above-ground houses with heaped up dirt roofs over flat slabs [A]; roofless houses laid out in village pattern [B].) Virtually none of these types appears in the Katak-Recuay region; the same is true of the various types found in the latter. Since our exploration did not include every unit in the region, and

since the excavation was limited, the presentation here will describe some of the house types and the excavated material, and discuss briefly the various sites examined.

## SOME CONSTRUCTION TYPES IN THE KATAK-RECUAY REGION

Type A: Central Subterranean Chamber with Several Connected Side Chambers. This type of subterranean construction is one of the commonest in the region of Katak. The concept is always the same, although the side chambers vary in number from two to six, with an average of between three and four. Unit 1K-A (Fig. 21) has a central room, 2.78 by 2.2 meters, oriented north to south, and 1.5 meters high from the clay floor to the slab cover-stones. The roof of this room is covered by two long parallel slabs plus cross slabs. The entrance to the main room is a shaft and lintel-covered doorway at the southeast corner. At the northeast corner a door leads to a connected chamber 2.5 by 1.23 meters. To the north is a connecting chamber 1.15 by 3.77 meters. A slightly smaller chamber is at the west, and at its south end is a still smaller connected chamber. The fourth connected chamber, 1.04 by 2.28, is at the south. The inner walls are made of upright slabs and horizontally placed thin small stones (Pl. 5). All spaces between the slabs are carefully filled with small stones and clay. Traces of red paint are seen. Actually a low mound is formed by dirt heaped up above this house, so that the roofing slabs are actually 1.63 meters deep, although only 1 meter below the general ground surface. Other sites show no trace of mounds.

Close to the above is a similar, although simpler, unit (1K-B) of the same type. Besides the central room it has two or three connecting chambers, depending on whether the now open room to the east, 1.08 by 2.38 meters, is considered a chamber or the entrance. A wall niche, 25 by 23 centimeters and 20 centimeters deep, is a new feature. Most interesting in this unit is the doorway leading from the main room to the west chamber. It is flanked by two upright rectangular slabs and covered with a rectangular lintel. Both side slabs and lintel are covered with a white paint on which a red design is still

<sup>1</sup> Tello, 1930, 270-271.

<sup>2</sup> Tello, 1930, 271.



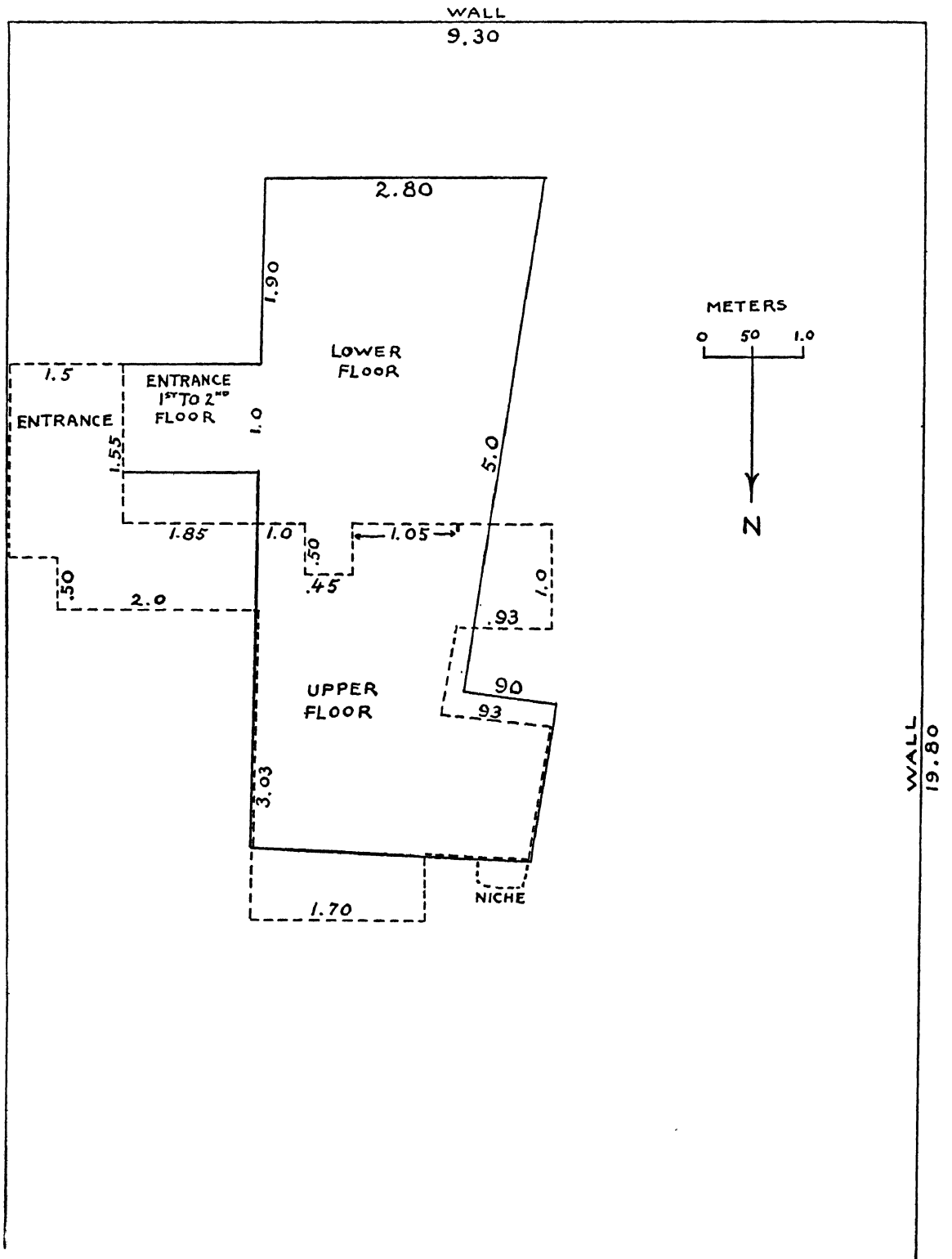


FIG. 22. Groundplan of house at Katak, Recuay.



south. The entrance, at the north end, is a shaft 1 by 1.15 meters, with a window-door into the gallery. A single wall niche was seen in the main gallery. This type is the simplest in the region and closely resembles the subterranean galleries found in the Wilkawain region. Site 6K-E was the only other gallery of this type seen.

Type C: Two-Floor Subterranean Gallery. Closely resembling Type B are galleries which, in addition to the main room, have a similar floor below it. Site 6K-F has a covered hallway,

the lower floor, but a stone in the floor of the upper gallery had been removed permitting entry. The lower floor is about the same size, but is partitioned lengthwise into two compartments by thin slabs. On the ground above, traces of a foundation of a surface building were visible. Two other units of this same general type were seen.

Type D: Two-Floor Above-Ground House. At Site 6K-D an above-ground stone house had at least two floors (Pl. 4d) and in many ways

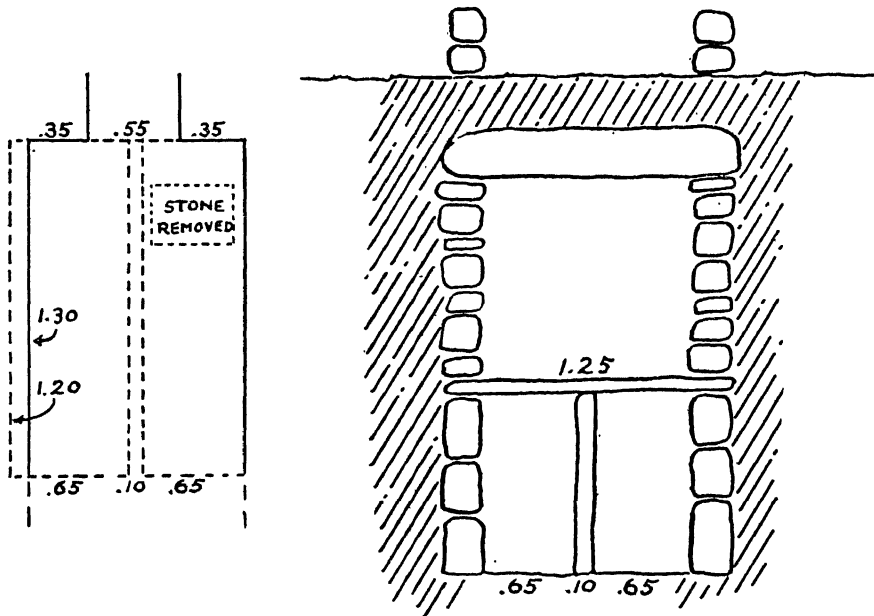


FIG. 24. Groundplan and cross-section of house at Katak, Recuay, Site 4K-D.

1.44 meters long and 68 centimeters wide, entered through a doorway on the east end, 44 by 58 centimeters. The hallway has two window-doors, one above the other, on the north side. Through the upper one, 65 by 79 centimeters, one enters the upper gallery, 1.65 meters wide, 3.01 meters long, and 1.56 meters high. Three small niches and a niche-like chamber are in the walls of the upper gallery. Through the lower door from the hallway one enters the lower gallery, exactly the same size as the one above, but only 1 meter high. Site 4K-F (Fig. 24) is a similar two-floor gallery, but with the hallway destroyed. A window-door gives entrance to the upper gallery, 1.25 meters wide and 2.2 meters long. No doorway of similar type was found to

resembled the above-ground house sites of Wilkawain. The groundplan is a square of 7.5 meters. On the east an entrance to the ground floor was seen, but it was not possible to enter. The second floor is set back on all sides, leaving a terrace from 1 to 1.4 meters wide. Outside measurements of the second story were 4.7 by 5.5 meters, and the floor contained two rooms about 1.4 meters high inside. The whole unit was about 3.5 meters high.

Type E: *Chullpas*. At site 5K a row of twelve *chullpas*, all badly destroyed, was seen. These are small above-ground stone structures, with two or more small rooms. All are made of rough stone. Certainly they were not intended as dwellings. Tello is said to have excavated two of these.

## MISCELLANEOUS CONSTRUCTIONS

Three types of graves were seen, but our own excavations uncovered none. Grave Type A is round, stone-lined, and slab-covered. Two seen at Site 1K were 85 and 53 centimeters, respectively, in diameter. Grave Type B is a stone-lined box under a surface boulder, similar to those seen in the Wilkawain region. Some are as much as 2 meters below the boulder, with the intervening space hollow at present, although not stone-walled, but this may be the result of recent excavation. Grave Type C consists of a rectangular box tomb, 1.84 meters by 84 centimeters, stone-lined and covered, with a special 48-centimeter square opening in the top. Those seen were up to a meter below the surface rock with the space between grave and boulder hollow, although unwallled.

## SITES IN THE KATAK-RECUAY REGION

Site 1K, Yunapampa. A site south of the Katak hacienda house, on the edge of a quebrada. Two Type A house units and two Type A graves were examined.

Site 2K, Ichik-Kayanan. East of the Katak hacienda house, about a half hour's walk, are some sixteen mounds representing subterranean house sites, and four stone circles about 1 meter in diameter, some with double rows of stones for walls. One house was excavated, and two others were measured. Two are of Type A and one is a special two-floor variant of this type.

Site 3K, Ichik-pata. One of a series of three ruins on a ridge to the north of the hacienda house of Katak. Graves of Type B and C are numerous, as well as galleries and Type A houses.

Site 4K, Raku-ama. South of Katak hacienda house, across a quebrada, is a large site said to be one source of the Macedo Collection. Graves of Type A and B were seen, as well as numerous house sites. Of those measured, five were of Type A and two of Type C. Two *chullpas*, house Type E, were seen.

Site 5K, Parillón. A site along the north bank of the quebrada and east of Site 1K presents a dozen Type E *chullpas*.

Site 6K, Gekosh. A section on top of a high ridge east of Ticapampa pueblo. Forty-eight or more units are represented. Of the six measured, one was Type A, two were Type B, two were Type C, and one Type D.

Site 7K, Yana-yako. A site east of 3K contained a number of galleries of Type B.

Site 8K, Garbanzo-oko. A site near 7K with Type B galleries.

Site 9K, Yaullish. Another nearby site with Type B galleries and graves of Type B.

Site 10K, Inca-tana. A site near and similar to Site 9K.

Site 11K, Castillo de Katak. On the flood plains below Katak hacienda house is an irregular hill with remains of walls. Some claim that it is artificial, but little trace of construction can be seen today.

Site 12K, Puruway. A site near 2K with some house ruins.

## EXCAVATION AT SITE 2K-A

We excavated in one of the low house mounds and were fortunate in discovering the entry way. This consisted of a fallen-in hallway, something over 1.36 meters square, which entered the main room of the house via a window-door, 60 centimeters wide, 65 thick, and 56 high. The house floor was at a lower level than the hallway. The main room of the house was 2.42 by 1.28 meters, oriented north to south, and 1.42 meters high. Five connected chambers off this main room were located as follows: one to the southeast, three along the west side, and one off the north side. The floor was of packed clay, and the walls were of the large slab and selected small stone technique so typical of all Type A house structures. Clay cement was used in the walls, but no traces of paint were found. The roof was composed of three large slabs and smaller cross stones. Actually, the roofing slabs were 1.62 meters below the top of the mound. On the surface above the house was the foundation of a 2 by 3 meter enclosure wall, although this was not precisely located over the main room of the subterranean house. An enclosure wall, 8 by 10 meters, surrounded the mound. Excavation along the floor furnished some 336 sherds.

## Materials from House Site 2K-A

*Plainware*

Thick orangeware, 78 fragments. Includes eight flare-rims of ollas, one straight rim of an olla, and four flare-collar rims of large vessels, five flat-loop handles and two collar lugs.

Thin orangeware, 96 fragments.

83 Olla fragments, including pieces of fourteen flare-rims

13 Orange tubes, including two with closed ends, although the others resemble the Wilkawain clay trumpets

Brownware, 6 fragments. All from a bowl with sieve base, and flat-top angular rim.

Crude reddish olla pieces, 41 fragments.

### *Polished Monochrome*

Blackware, 23 pieces.

8 Goblet fragments, representing plain and raised band goblets

2 Pieces of a slightly angular-bodied bowl with a plain rim

12 Pieces of globular vessels

1 Piece of an angular-bodied double-spout bowl with a relief face design

Redware, 33 fragments.

29 Pieces of globular vessels, including a flat-loop handle, and a flare-rim

2 Goblet rims

2 Straight rims of cups

### *Paintedwares*

Red-on-gray, 14 fragments, including two pieces of toy ollas, an annular base fragment, and a straight rim piece. Ten pieces come from one large shallow plate with wide bands forming a simple locked design.

Red-on-orange, 9 fragments, including two pieces of a shallow tripod plate, four rims of shallow plates, two simple bowls with flare-rims and flat horizontal handles, and one body fragment. In all cases the designs are composed of simple lines.

Red-on-buff, 8 fragments, all from open-bowls. One has a fine-line design of line, circle, and simple face, and two others have relief designs of a modeled head.

White-and-red, 7 pieces, probably all from one vessel with relief design, including a modeled foot lug, a head comb, and parts of a relief arm. From the small fragments this vessel might represent either Recuay or Early Chimú style.

Black, white-on-red, 1 fragment, representing the base of a vase, with a simple linear design.

### OBSERVATIONS ON THE KATAK-RECUAY REGION

The collection from Site 2K-A is obviously too limited for detailed comparisons, and over-weighted with plainwares. From its general appearance it looks like still another sample of the Wilkawain Tiahuanacoid material, although lacking many of the characteristics. On the other hand, toy vessels, sieves, tripod plates, large shallow plates, blackware goblets, redware, and the general type paintedwares are all typical. The question as to whether this material was left by the builders of the subterranean house or whether it represents a later intrusion cannot be answered from the evidence at hand.

Our limited work in the area presents certain details but little basis for interpretation of the house types, or for a solution of the Recuay problems. The absence of stone statues in the region is noteworthy, since one style is found in abundance at Aija and another in the Huaraz region. On the other hand, none was seen by us, nor have any been reported from the Katak-Recuay area.

## PART 2. EXCAVATIONS AT CHAVÍN DE HUÁNTAR

THE RUINS OF CHAVÍN DE HUÁNTAR lie just south of the pueblo of Chavín, east of the Cordillera Blanca, on small tributaries of the Marañón River. Some general descriptions have already been published,<sup>1</sup> and the discussions of Chavín sculptural style are numerous. Some excavations have been made by Julio C. Tello and Santiago Antúnez de Mayolo, but no accounts have as yet appeared.

Chavín as a site is important in itself. The massive platform buildings with their well-faced walls and maze of interior galleries are unique in Peruvian archaeology. The associated stone sculpture presents a style which is

certainly outstanding, even though affiliations with other Peruvian sculpture may ultimately be demonstrated. Recent discoveries on many parts of the coast of Peru have augmented the importance of Chavín by demonstrating affiliated styles in ceramics and wall decorations. In other words, Chavín, as a period or a complex, is slowly taking its place as the third Pan-Peruvian style, along with Tiahuanaco and Inca. Consequently, the results of our survey of the ruins and the excavation of 16 pits therein are presented in some detail, even though we are quite aware that the solution of the total Chavín problem is still to be found.

### THE RUINS

For descriptive purposes, the building units in the Chavín ruins are divided into nine sections, lettered A to I (see sketch plan of general layout and location of excavated pits, Fig. 25). The principal ruins cover an area of about 250 meters square, although the extension of the artificial archaeological area is much greater. In general, the orientation of all ruins is on an east to west and north to south basis, although some deviations are found. For descriptive purposes the orientation is considered relatively true, and in the plan the ideal layout is sketched.

#### UNIT A, THE CASTILLO

One of the best-preserved and certainly the most frequently illustrated unit is this principal structure forming the southwest corner of the ruins. Actually the southern half of the Castillo is beautifully preserved, while the northern half is badly destroyed. Thus the southern end measures 72.5 meters in width, and the north to south length is estimated as about 75 meters. Measurements at the well-preserved southeast corner of the Castillo show that the inclined, well-faced wall rises to a height of 9.5 meters, where it is interrupted by a flat ledge 2.5 meters wide, followed by another rise of 2.5 meters. Behind this terraced ledge the earth is built up for at least another meter to the level of the house founda-

tions on top. Actually then, as viewed from the east, the Castillo achieves a total height of over 13 meters above the surrounding terrace, and the buildings on top would add even greater height. It is doubtful whether the building was of this height on all four sides, since it is set on the terrace sloping down to the Mosna River at the east. In fact, only about 4 meters are exposed along the west side, although the modern road and the accumulation of dirt may hide part of the construction.

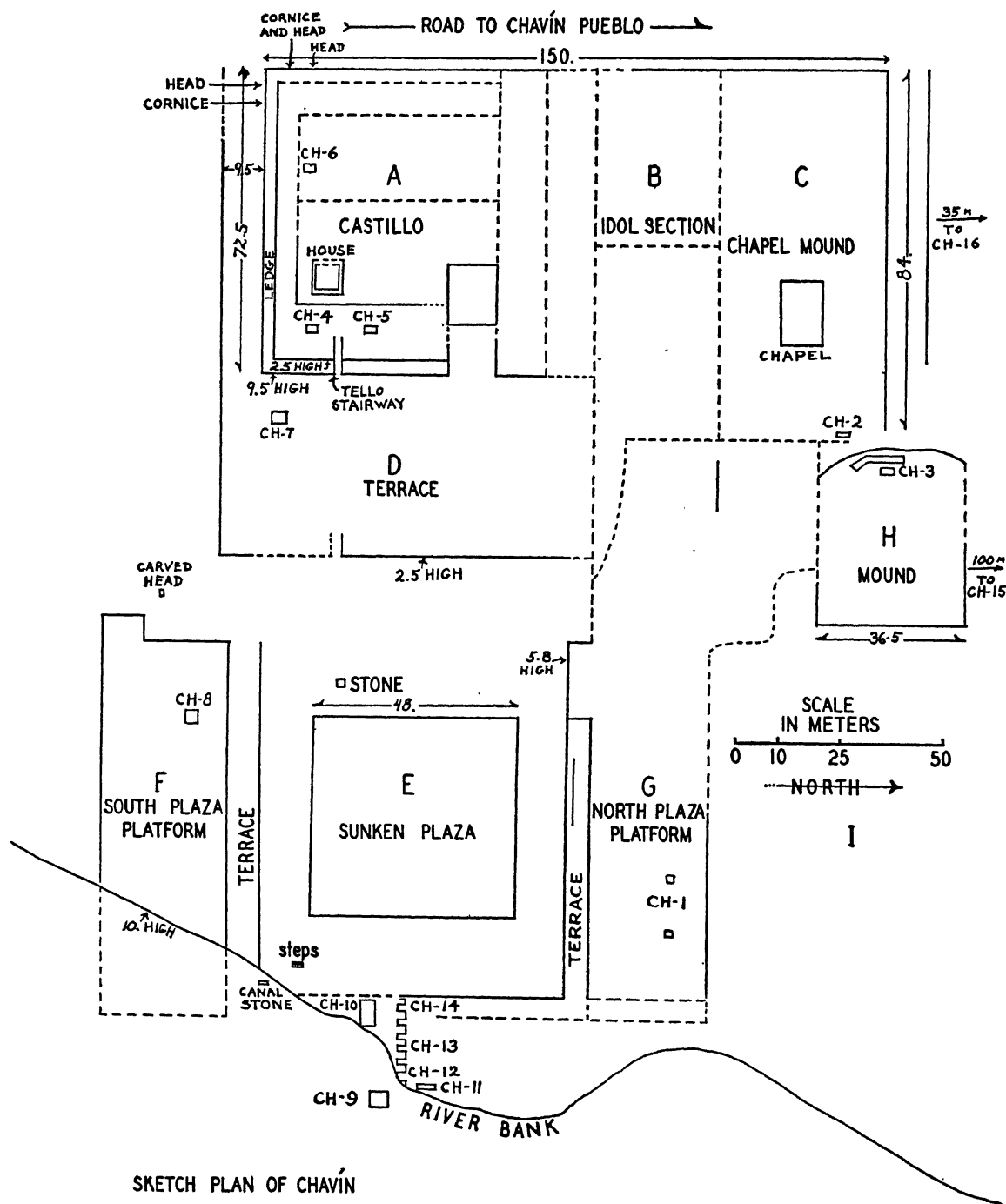
A stairway (Pl. 6a), first uncovered by Tello,<sup>2</sup> cuts through the east face of the temple, 17 meters from the southeast corner. It is not centered on the east side and it is possible that a matching stairway once existed farther to the north, although, due to bad destruction, no trace of this is now visible.

At the southwest corner are preserved details which can no longer be seen in other parts. Sections of a cornice are still present in the form of projecting flat slabs, well dressed and carved on the edge and bottom surface, at about the level of the setback terrace ledge. One stone and a fragment of another cornice are still in position; several other flat decorated slabs in the area can be considered as additional examples. Below the projecting cornice, heads carved in the round, with projecting tenons at the back, were inserted in the wall. Two of these heads are still in position at the south end of

<sup>1</sup> Middendorf, 1895; Raimondi, 1873; Roosevelt, 1935; Tello, 1929, 1930; Wiener, 1880.

<sup>2</sup> Tello, 1930, 277 and Fig. 11.





SKETCH PLAN OF CHAVÍN  
SHOWING PRINCIPAL BUILDINGS  
and  
LOCATION OF EXCAVATED PITS

FIG. 25. Groundplan of ruins at Chavín.

the east wall, and the base of another is seen on the south wall. Many heads with projecting tenons are found in the local museum and private collections, all presumably taken from the ruins.

On the flat top of the Castillo, foundations of rectangular houses made of well-dressed stone may still be seen. Tello<sup>1</sup> has illustrated some of these. The north side of the unit is badly destroyed, although traces of two wide descending terraces are seen. The west wall, beside which runs the road to Chavín pueblo, apparently continues and serves to unite the Castillo with Units B and C to the north.

The interior of the Castillo is honeycombed with stone-lined slab-covered galleries and rectangular rooms, forming at least three floors and perhaps more, many connected by stairways and inclines. Likewise, the interior galleries are ventilated by a complex system of vent shafts, not only connecting galleries on the same floor, but running vertically as well. The interior galleries have been frequently described.<sup>2</sup> They vary from 1 to 1.5 meters in width and from 1.5 to over 3 meters in height. The walls are made of selected split stones neither dressed nor carved, placed in horizontal rows of large stones, alternating with very small ones. Niches, as well as the openings to the ventilating shafts, are found in the wall. All galleries are roofed with selected slabs which either extend entirely across the gallery width, or rest on slightly projecting stones at the top of the walls. The rooms are about 2 meters wide and from 4 to 5 meters long. All doorways are covered with lintels.

The outer walls of the Castillo are faced with well-dressed granite slabs (Pl. 6b), again set in horizontal rows, with wide and narrow slabs alternating. Sections like the corner of the Tello stairway present beautiful stone masonry. Behind the facing is a rubble fill of dirt and mixed stones. Quite obviously, the Castillo was built up floor by floor with galleries, vents, facing, and fill carefully planned.

Three test pits (Ch-4-5-6) were excavated on the top of the Castillo, not with any hope of uncovering architectural features or achieving great depth, but to discover dwelling site refuse,

either from the presumably contemporaneous houses on top, or from post-Chavín periods. While some late material was found, the excavations were not too important.

The terrace which is seen on the south and east side of the Castillo is described as Unit D.

#### UNIT B, THE IDOL SECTION

Between the Castillo and the large mound to the north (Unit C) is a setback section which Tello<sup>3</sup> describes as a narrow terreplein connecting the two. The west wall shows no distinct break from that of the Castillo. On the east side are two sets of steps and two entrances to the galleries. The south entrance has been described, with a plan, by Roosevelt.<sup>4</sup> The north entrance leads to the now famous room containing the monolithic statue (the *lanzon*) still *in situ*.

#### UNIT C, THE CHAPEL MOUND

North of the main Castillo is a badly weathered mound or platform on which is located a small modern chapel which gives it a local designation. The west wall of this platform or mound seems to be the unbroken continuation of the west wall of Units A and B. It is true that this western edge of the ruin group is badly disturbed in spots, but in the total length of 150 meters no definite division units can be distinguished. The chapel mound is about 40 meters wide (north to south) and some 84 meters from east to west. Along the north edge is a terrace, about 10 meters wide, corresponding perhaps to a similar terrace at the south edge of the Castillo. The chapel mound is also honeycombed with interior galleries. One pit was excavated at the base of the mound at the eastern edge (Ch-2).

#### UNIT D, THE CASTILLO TERRACE

Along the south side of the Castillo is a terrace about 9.5 meters wide. This apparently continues along the east side, where it broadens into a wide terrace of 43 meters with a facing wall along its eastern edge still standing 2.5 meters high in some places. At a point directly east of the Tello stairway in the Castillo, an angle in the terrace facing wall suggests the

<sup>1</sup> Tello, 1930, Fig. 10.

<sup>2</sup> Raimondi, 1873, 213; Tello, 1929, 50-53; 1930, 277-278; Roosevelt, 1935, 37-42.

<sup>3</sup> Tello, 1930, 277.

<sup>4</sup> Roosevelt, 1935, Fig. 23.

possibility of a stairway there also. One pit was excavated on this terrace (Ch-7) without results.

#### UNIT E, THE SUNKEN PLAZA

Directly east of the Castillo and the terrace is a square area, 48 meters on a side, which appears to be a sunken court. At the time of examination the whole section was planted with oats which obscured some details. This plaza, if such it be, is fairly well centered in reference to the Castillo, and about 80 meters from it. Just outside the southwest corner of the plaza is a large flat boulder with seven grind holes and a rectangular niche. The stone is in rough line with the Tello stairway and the break in the terrace wall of Unit D. Some local people claim that the Raimondi monolith once stood in this niche in the flat boulder, but no positive evidence of this is available. The plaza is outlined on three sides by terraces, one along the river front, and two at the bases of the side platforms. Both to north and south of the plaza are platforms described here as separate units.

#### UNIT F, THE SOUTH PLAZA PLATFORM

Flanking the south side of the plaza is a platform, oriented east to west, and about 30 meters wide. A rectangular projection is seen at the west end. The length can only be estimated, since the Mosna River has cut deeply into the platform. By comparison with the north platform the length should be about 90 meters. The river cut shows the rubble construction of the inside, as well as some poorly constructed interior galleries (Pl. 7c). The base of the platform is close to the water level, and great stones are utilized in the foundation. The top of the platform is about 10 meters above the river at the cut. Its sides show no trace of the dressed-stone facing of the Castillo. A terrace bounds the north side, next to the plaza.

Near the northeast corner of this platform is a dressed rectangular stone with a longitudinal groove cut from one side like the canal stones of Tiahuanaco. Nearby is a set of monolithic steps, although not in position. One pit was excavated on top of this platform (Ch-8).

Along the river side of the plaza a number of pits were excavated (Ch-9, 10, 11, 12, 13, 14).

The details uncovered will be described with the excavation notes.

#### UNIT G, THE NORTH PLAZA PLATFORM

A platform similar to Unit F flanks the north side of the plaza. It is well preserved along the south side and eastern end, but the northwest delineations are vague. Tello<sup>1</sup> states that this platform runs from northeast to southwest, although we frankly failed to notice this discrepancy. The platform is some 28 meters wide and about 90 meters long with a projection to the south at the western end. A terrace runs along most of the south side. One pit (Ch-1) was made on this platform, revealing vents which indicate interior galleries.

#### UNIT H

Just northeast of the chapel mound (Unit C) is another mound which is not oriented with the rest of the ruins. A saddle gap separates it from Unit C on the west, and a rough facing wall along the east is 36.5 meters long. The east-to-west measurement is roughly 51 meters. Non-Chavín ceramics and building features were found in the excavations along the west edge (Ch-3).

#### UNIT I, THE INCA AMPHITHEATER

In the northeast corner of the total ruins are a few vague, somewhat curved walls which have the impressive name of Inca Amphitheater. Some terrace walls of massive stone can be seen (Pl. 6d). Our investigations neglected this section, so no accurate description can be given.

#### THE ADJACENT REGIONS

Aside from the main construction units the region around Chavín has many features of archaeological interest. The fields to the north of the ruins contain many sherds, some of Chavín style (Ch-15, 16). Tunnel mouths were seen along the river cut to the south of the ruins. Others are reported under Chavín pueblo and across the Mosna River. Obviously, much more work is needed in this whole area. For one thing, in spite of the amount of casual investigation, no Chavín cemetery site has yet been discovered.

<sup>1</sup>Tello, 1930, 277.

## EXCAVATIONS

In the following pages a brief description of the excavation of the sixteen pits is given. For the most part, the analysis of artifacts encountered is reserved for special discussion, since such a description for each pit would involve considerable repetition without great significance. Search within the galleries now open proved fruitless, either because sherd material was not deposited in them, or because the years of casual investigation have made their impression. Surface sherds were not too abundant. Doctor Soriano encouraged the school children to bring him "Chavín" style fragments of pottery, but even with a monetary incentive relatively few were discovered. A cut like that made through the south plaza platform, Unit F, by the river has revealed virtually no sherd material, and the occasional pieces found in the river wash might well have been carried down from the fields above.

Judging by the river banks, much of the region around the ruins is artificially built up as, obviously, are the constructions themselves. Such artificial building and leveling of terraces limit the reward of the excavator, since sherds would be mixed in only by chance, or as part of the fill dirt itself. In fact the potentiality of pre-Chavín stratification in the ruins themselves is limited by the difficulty of cutting pits below the artificial level. Other parts of the Chavín region might well present other circumstances, but our digging was limited to the ruins themselves. Consequently, about the only hope we had was for good post-Chavín styles. The quantity of post-Chavín material was enormous, but for the most part disappointing in distinctiveness.

The location of all pits is indicated on the sketch plan and consequently will not be described in detail again.

Pit Ch-1. Near the eastern end of Unit G, two stone-lined vents were discovered. One was 40 by 60 centimeters at the surface and was surrounded by a stone slab wall. The vent descended in steps at about a 45-degree angle and then turned sharply downward. It was largely filled with stone, so that entry became impossible. The other vent was narrower, but entered at about the same angle. Obviously such shafts are too small to have served as entrances to

galleries. A small canal ran from the mouth of one vent for about 4 meters. Six sherds were encountered, all plain, but one with the thick rim of Chavín style.

Pit Ch-2. At the eastern edge of Unit C, in the saddle which separates Unit C from Unit H, a pit 3 by 1.25 meters was excavated. This was near a long trench made by Dr. Antúnez de Mayolo. A rough wall cut across the north end of the trench from the surface to 1.1 meters depth. Another rough wall from 1.25 to 2 meters deep was found at the south end of the trench. At 2 meters depth we encountered the cover-stones of a gallery which had long since been almost entirely caved in, but a clear section was found about 2 meters long. The gallery was small, only 1.3 meters deep and of about the same width, with walls of small rough stone and good-sized covering slabs. Although the gallery obviously continued to north and south, it was impractical and dangerous to attempt to follow it.

Sherd material was abundant. A total of 1950 pottery fragments includes nine which might be considered Chavín types. A bone and a stone artifact were also included. In excavating, the materials were separated into six lots on the basis of arbitrary half-meter levels, but the only suggested stratification was between Incaic and Tiahuanacoid types.

Pit Ch-3. The third pit (Fig. 26) was located just northeast of the second along the western edge of the mound of Unit H. The mound rises steeply at this point making surface depth measurements somewhat meaningless. Late stone-facing walls were discovered, and the pit was extended to uncover them. The facing walls run roughly north to south along the west edge of the mound. Starting at the north is a straight wall of rough stone somewhat poorly laid, 5.5 meters long and about 2 meters high. At the level of its base, and about 30 centimeters in front of it, was a 2-meter section of a stone-lined and slab-covered canal. It was 40 centimeters wide and shallow. Between the canal and the wall a pair of complete thick redware goblets (Ch-3A) was found without grave association (Fig. 28a). Both are good Inca types.

At the south end of the facing wall is another

wall, possibly either another facing wall or a house wall. The north end presents a sharp curve, then a north to south stretch 2.42 meters long, a sharp angle to the west, of 64 centi-

ered with slabs. The cover-slabs were at the level of the base of the wall, and the walled section extended to a depth of 30 centimeters. We excavated to a depth of 1 meter, finding

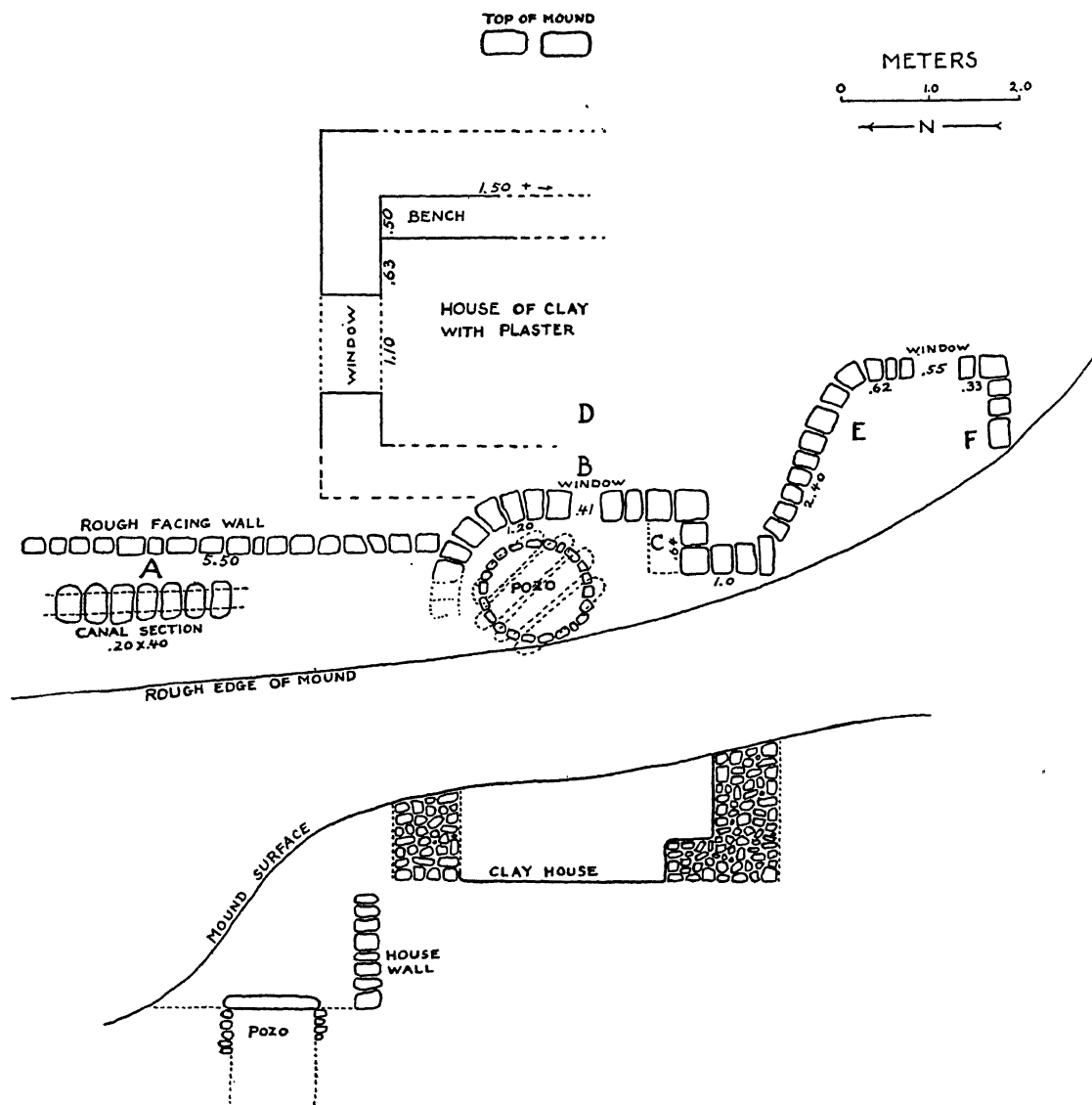


FIG. 26. Groundplan and cross-section of Pit 3, Chavín.

meters, an angle to the south of 1 meter, an oblique turn to the southeast of 2.4 meters, another turn to the south of 1.5 meters to a final angle to the west.

Several features mark this second main section. West of the wall, at its north end, was a 1-meter circular pit, lined with stone and cov-

nothing but sherds. Near the pit, in the north to south section of the wall, was a carefully made window, lined on all four sides with slabs, and measuring 41 centimeters square and 33 centimeters thick. The window leads through the wall into the mound, and its function in this position is dubious. Excavation on the back

side uncovered a burial (Ch-3B) associated with a crude black spoon and a small olla. Another spoon and olla found nearby may well belong to the same burial. Since this burial appears to be intrusive from the present surface of the mound, it is quite possibly post wall in time.

In the corner formed by the sharp right angle of the wall to the south of the window was a stone-lined box, 30 by 60 centimeters, covered by a thin slab. It contained the skeleton of a young female (?) with an olla (Fig. 28c) and a small jar (Ch-3C). Continuing along this angular wall another window was found, 55 centimeters wide and 37 high. West of the window, on either side, were two burials without artifacts. Ch-3E contained the deformed skull of a child and pieces of an infant skull. Ch-3F contained one flexed burial in seated position and miscellaneous bones. Both Ch-3E and Ch-3F were burials in very crude stone boxes.

Behind the house or facing wall and higher on the mound was a house construction of a distinct type with burnt clay plaster walls (Pl. 7a, b). The house was probably about 2.86 by 2 meters, although only the north wall is well preserved. This is 75 centimeters thick and contains a window-door 1.1 meters wide and 50 centimeters above the clay house floor. The original height of the wall is unknown, but it still extends 1.13 meters to the ground surface. Along the eastern wall was a clay bench 50 by 50 centimeters. Other walls were completely destroyed. The composition of the walls is stone, and clay cement, all covered, inside and out, with a 1-centimeter thick clay plaster, tempered with straw, and fired to a very hard consistency. No ceramics could be identified with the house, and an extended burial at the western edge (Ch-3D) contained no artifacts and is probably later than the house.

The first sherd material was divided into three arbitrary levels, but the later work showed that sherd stratigraphy was meaningless on this steep slope. Six complete bowls and two spoons were found, as well as 996 sherds, of which only five seem to be Chavín style. Other artifacts include two of stone, five of bone, a shell and a clay whorl.

Pit Ch-4. On the southeast corner of the main Castillo (Unit A), we made a pit 3 by 2.25 meters. This is not the highest part of the Castillo and some wash has resulted. Forty centimeters of top black soil contained Late sherds. Below

this was a hard yellow clay, undoubtedly the original covering of the temple, and without sherds. Of the 233 sherds encountered not one seemed Chavín in style.

At the north side of the pit, at 1 meter depth, the entrance to one of the Castillo vents was found. This starts with a 45-centimeter square shaft, descends for 1 meter, then slopes slightly to the north for 2 meters, drops again for 1.5 meters, followed by a horizontal stretch for 1 meter and a final vertical drop which we could not examine. Undoubtedly this vent leads to some of the interior galleries, but the peculiar feature is the fact that the mouth was not only 1 meter below the surface but was also covered with a stone slab. Intrusive burials had broken through the roof of the first sloping part of the shaft, and bones and about eight broken ollas were found.

Pit Ch-5. Another pit on the same terrace as Ch-4 was made just north of the Tello stairway. Sherds of Late styles were found between the fallen stones, as well as a shallow burial accompanied by a crude vase and an annular-base open-bowl (Fig. 31q). Further excavation seemed impractical at this point.

Pit Ch-6. A test pit on the highest part of the Castillo in the southwest section did not even produce sherds.

Pit Ch-7. Just east of the southeast corner of the Castillo a pit uncovered a number of stones in rough rows, but even down to 1.5 meters depth contained no sherds.

Pit Ch-8. A pit 2.5 meters square was excavated in the northwest sector of the south Plaza platform (Unit F). Here the yellow clay starts at the surface, and contains but few sherds. A stone slab was found at 90 centimeters depth and some 20 centimeters under this a stone-lined and slab-covered box grave, 37 centimeters square and 65 deep. This box contained some badly disintegrated bones and two vessels, one a plain orange olla with two flat loop handles (Fig. 28b), and the other a small bowl decorated with a red-on-orange band. Just outside of the box two plates were found, one orange and one red-on-orange. The pit was continued to a depth of 1.5 meters. Outside of the intrusive burial only eight sherds were found. One of these, near the bottom of the pit, is black polished with a groove design of the Chavín type. It suggests the association of Chavín sherds with the temple construction.

Pit Ch-9. Reports of the finding of incised sherds along the river bank led us to cut a pit on the flood plain just about east of the center line of the plaza (Unit E). A section, 2 by 1 meters, was excavated to a depth of 1.3 meters and then cut back into the bank for a maximum size of 2 by 4 meters. Most of the soil was disturbed by the river into a mixture of black soil and waterworn stones. The 138 sherds found seemed consistently of Chavín style. Fragments of shell and coal were also found.

Pit Ch-10. Since the material from Pit Ch-9 was disturbed by the river floods, the next pit was made to the west, on the top of the bank. This was started as a cut 2.5 by 4 meters and later enlarged to 3 by 6 meters. Chavín type sherds were found throughout. The top meter of the pit contained a fill of many small rough stones and an occasional large one. The next 1.1 meters was composed mainly of yellow clay with some sherds and stones. At 2.1 meters depth a layer of charcoal crossed the whole pit. Mixed in it were sherds of good Chavín style. Along the north side of the pit a rough stone wall extended from 1.7 meters depth to this charcoal line. Apparently this charcoal layer represents an old surface since it reappears at about the same level in Pit Ch-12.

At about the center of the pit and just above the charcoal level was an angular canal, lined with a double row of stones and covered with small slabs. The inside measurements are 17 centimeters wide and deep, and the cover slabs are 1.86 meters below the surface. Actually this canal section forms an angle 82 centimeters on each side, and the ends are carefully closed with small slabs. Similar canals are seen in the bank along the river cut, but this one with the ends walled seems meaningless. Within the canal were Chavín sherds and a piece of stone.

The pit was excavated to a depth of 2.5 meters with the yellow clay continuing, but without sherds. The river cut indicates over 4 meters of artificial construction. The material was divided into four arbitrary levels in excavating, but no significant stratification appears. A total of 305 sherds of Chavín style was found, as well as a piece of a stone bowl.

Pit Ch-11. Another pit (Fig. 27) along the edge of the river bank, northeast of Ch-10 and east of the plaza, failed to repeat the Ch-10 set-up because of disturbance and intrusive burials. The intrusive burials can be listed briefly:

Ch-11A. A stone box grave, 50 by 44 centimeters and 64 centimeters deep, was based on one stone and utilized the end of a large fallen slab for a cover. It contained the skeleton of a youth with deformed skull, in flexed position on the back with the knees up. No artifacts found.

Ch-11B. A grave of oblong shape, 60 by 40 centimeters, and 30 centimeters below the surface. The same fallen slab which partly covered Tomb 11A formed a side wall of this grave. The other three sides were stone-lined, but without a cover-stone. It contained a flexed burial and mixed fragments of pottery.

Ch-11C. A stone-lined and covered box grave, 52 by 80 centimeters and 44 centimeters deep, contained a flexed burial, but no artifacts.

Ch-11D. A rough stone tomb, 58 by 65 centimeters and 65 centimeters deep, contained bones in bad condition and some sherds.

Ch-11E. A skeleton was found at 40 centimeters depth in a poorly delineated grave.

Ch-11F. A second grave under 11C had three flexed skeletons.

Ch-11G. Another burial was 50 centimeters under 11D.

Ch-11H. A burial was just north of 11A.

Ch-11I. A burial was near 11E.

No complete vessels were found with these graves, but sherds were plentiful in the section. Of a total of 486 sherds, eleven are of the Chavín style. The rest represent the white-on-red style and others of post-Chavín period. Two large cover-slabs and many other stones in mixed position indicate considerable disturbance. The two slabs possibly were the roofing stones of another cell like those in the series of Sites Ch-12 to Ch-14. The position of the graves in relation to these slabs would leave no doubt as to their intrusive and late position.

Pits Ch-12, Ch-13, and Ch-14. The next three pits (Fig. 27) are grouped together here because all uncovered cell-like houses formed a row (Pl. 6c). Actually six cells were seen and the row may once have been longer, although it is difficult to prove this since the river has cut its bank close to Cell 6. The two cover-slabs described in Pit Ch-11 are suggestive.

It was mentioned previously that the remains of a terrace along the river bluff, east of the sunken plaza, can be seen. Almost exactly east of the center of the plaza at the inner edge of this terrace is an upright stone. Directly east of this stone, although not actually meeting it,

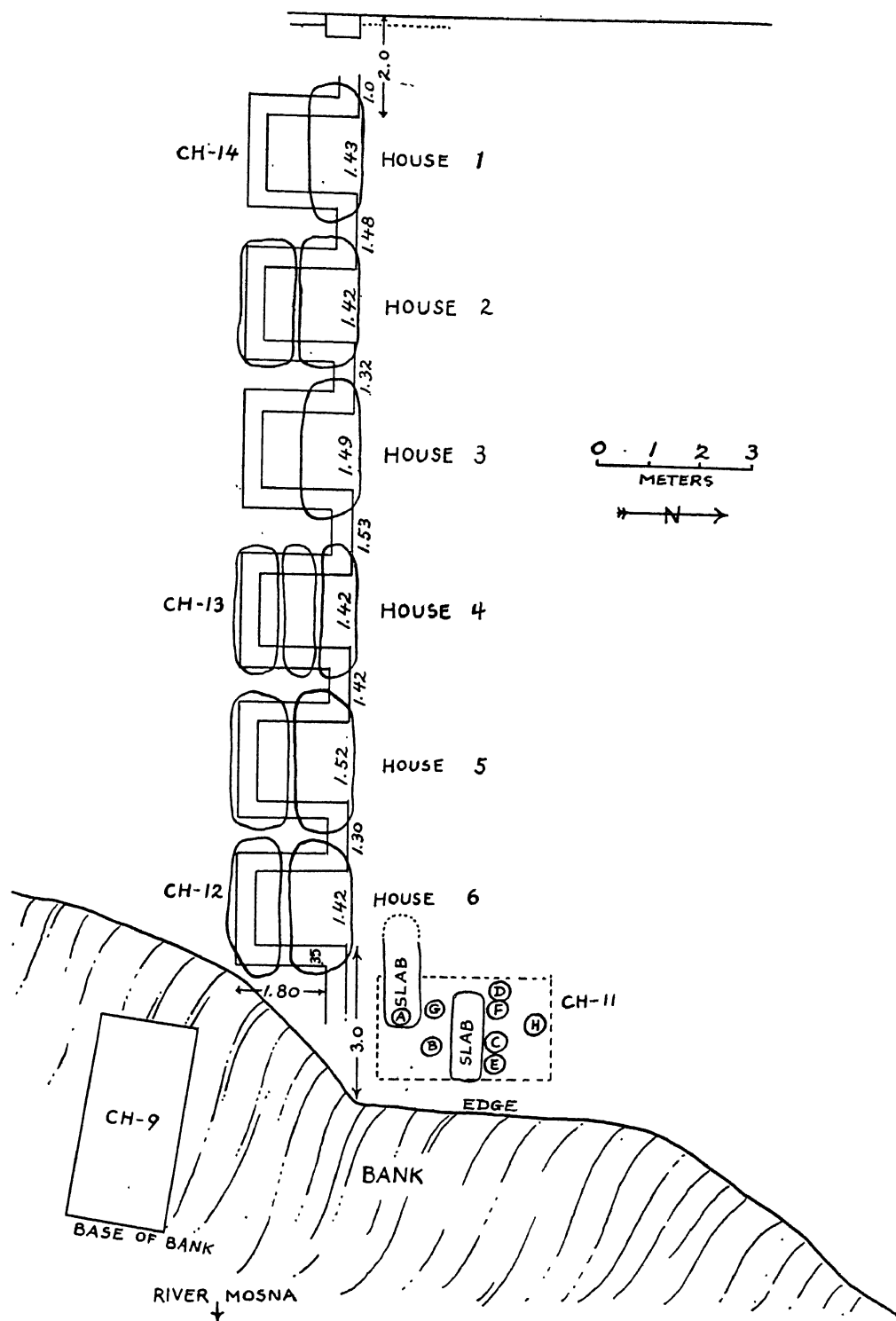


FIG. 27. Groundplan of excavations of Pit 9 and Pits 11-14, Chavín.



is a wall which extends some 20.75 meters to the river bluff. Six small cells open off the south side of this wall. All are of about the same size and construction, so that a detailed description of one (Ch-12, Cell 6) will serve for the rest.

Ch-12, Cell 6, is rectangular, measuring 1.4 meters wide and 1.82 meters deep. Rough stone walls outline three sides and the fourth, on the north, is open. The walls, about 35 centimeters thick, are not as well made as those in the Castillo galleries, but are about the same workmanship as the galleries in the south plaza platform. Two large slabs serve as covers, one placed flush with the front opening. A clay floor is 1.42 meters below the roof, with two stones set in the floor at the door opening. The side walls extend only a few centimeters below the floor. Below the floor, at about 2.4 meters depth, the charcoal layer mentioned in Pit Ch-10 was again encountered. The charcoal layer represents, then, a pre-cell level, although in both cases Chavín sherds are associated. In this particular cell only Chavín style sherds were found.

The other five houses or cells are essentially the same, each separated by about 1.45 meters, but connected with the north wall. There is no indication that these cells were originally part of a subterranean gallery, nor that any other construction unit was definitely associated with them.

The cells were numbered from west to east. Of the six, three were excavated by us, Nos. 1 (Ch-14), 4 (Ch-13), and 6 (Ch-12). Doctor Soriano Infante cleared two more, Nos. 2 and 3, and Cell 5 was left untouched.

Four cells (Nos. 1-4) contained intrusive burials and broken pottery vessels of Late types. No. 4 contained five burials associated with broken and restorable vessels of the white-on-red style (Fig. 31r). Three complete vessels and 256 sherds of similar Late vessels were found in these cells plus 692 sherds of Chavín style and three stone artifacts. It seems clear that the cells were associated with Chavín ceramics.

Pit Ch-15. To the north of the principal ruins of Chavín are flat fields, some planted, and some with groves of eucalyptus trees. About 100 meters north of the mound of Unit H, in a field belonging to Sr. Ramirez, a pit 4 by 1.5 meters was excavated to a depth of over 2 meters. The field is level and has had little washing. From the surface to 1.5 meters depth Chavín style sherds were found in abundance. Below 1.5 meters some sherds were found, but as the greater depths were reached they ran out completely. Tests in various corners below 2 meters showed no continuation of the sherd material. The cross-section shows no obvious layers. Animal bones, charcoal, and sections of small and large stones are seen. In general, the material seems to be house refuse. Some 1465 Chavín style sherds were found, separated into four levels. Eleven Late sherds were found in the top layer only.

Pit Ch-16. In the field immediately to the north of the chapel mound (Unit C) a pit 4 by 1.5 meters was excavated on the property of Sr. Poza. A rough stone wall crossed the pit from east to west, 50 centimeters below the surface, meeting a north-to-south wall. It is possible that these walls are house foundations. North of these walls, at 1 meter depth, was a stone box grave 30 by 60 centimeters. Another stone box grave, 88 centimeters below the surface, was 60 by 60 centimeters and 80 centimeters deep. Both of these graves had disintegrated bones, but no artifacts. An open burial in front of the second box contained a complete bowl. In the southeast corner of the pit at 1.35 meters depth, was a stone-lined and slab-covered oval area, 1.52 meters long and 1 meter deep, which extended for 95 centimeters in depth. It contained a few sherds. Most of the top meter contained sherds of Late types. From 1 meter to slightly below 2 meters Chavín type sherds were found, although still somewhat mixed with later types due to intrusions. In total, a bowl, a spoon, and 357 sherds of Late type were assembled, plus eight stone, nine bone, and two miscellaneous artifacts. To this can be added some 334 sherds of Chavín style.

### THE CHAVÍN MATERIALS

The survey of the Chavín ruins and the excavations show a Chavín building, sculptural and ceramic style as the earliest material. The

analysis is thus limited to Chavín style itself, plus several post-Chavín styles. Due to the increasing importance of Chavín style in the total

history of Andean archaeology, the materials are here treated separately in terms of ceramics, architecture, and stone carving, and the discussion of the post-Chavín styles is reserved for a later section.

#### CHAVÍN CERAMICS

Chavín ceramics are represented by two complete vessels (purchased by Dr. Soriano) and 2990 sherds from the surface and the excavations. These pieces can be distinguished from the other sherd material, and the validity of the style is established by its isolation in Pits Ch-9, 10, 12, and 15. That the ceramics pertain to the ruins of Chavín is indicated in a number of ways. First, no stratigraphic earlier material was found. Second, the pieces were found in the temple top clay fill (Ch-8), in the artificial terrace along the river (Ch-10, 12, 9), in an old charcoal layer apparently antedating some of the stone construction work (Ch-10, 12), in the stone-lined and covered cells along the river bank (Ch-12, 13, 14), and in the fields to the north of the ruins (Ch-15, 16). Third, the style is obviously related to Coast Chavín ceramics which in turn have designs comparable to Chavín stone carving. Fourth, styles represented by the other excavated sherd material can all be shown to be in definitely late positions in reference to the stone construction work of the ruins. In three pits (Ch-10, 12, 15) the Chavín style sherds were segregated into three to five excavation levels, but the analysis shows no significant differences in levels, nor does the collection as a whole indicate startling variation in style. Thus, for descriptive purposes, the collection must be treated as a whole.

#### COLORS

The following table presents a résumé of the Chavín wares:

Ware	Pieces	Per Cent
Monochrome blackware . . . .	1374	45.95
Monochrome brownware . . . .	901	30.13
Monochrome redware . . . . .	427	14.28
Monochrome orangeware . . . .	272	9.10
Black and red painted . . . . .	9	.30
Miscellaneous . . . . .	7	.24
Two-color negative 1		
Tan 2		
Whitish 4		
Totals . . . . .	2990	100.00

The predominance of monochrome black, brown, and redwares is obvious. Most of these are well polished, and some achieve a high polish. Sand and mica temper seem to be the rule, and the fragments show good firing, although not to the almost metallic hardness of Cupisnique. Orangeware appears in greatest quantity in the top half meter of Pit Ch-15 (184 pieces) and is only sparsely represented in the deeper levels. The rim shapes and general finish of the orangeware do, however, suggest Chavín affiliation.

The nine positive painted two-color pieces all have black and red areas separated by incised lines. Most of the fragments are small, but none the less the band pattern which typifies the two-color pieces of Cupisnique is not represented. The only negative painted body fragment in the collection has a linear design in red and orange negative. It was found in the deepest level of Pit Ch-10, together with typical black and brownware. The two tan pieces are quite distinct from the general brownware and both have a high polish. Four remaining pieces have a slightly whitish finish. Two pieces, not included in the positive painted group, are blackware with incised grooves filled with red paint.

#### RIMS

Of the total number of sherds 517 or 17 per cent are from rims. The major rim types are shown in Fig. 28, and their frequency and percentage are given in the following table. Characteristic of Chavín rims is the thickness at the edge, frequently augmented by an inward or outward bulge, from which they taper rapidly to a relatively thin body. Most of the rims are from open-bowls, a fact which will be elaborated in the discussion of vessel shapes. Black, brown, red, and orangewares are all proportionately represented by rims. Some of the rim pieces show incised design (72 pieces), but the majority are from plain vessels.

#### SHAPES

Shapes of vessels are indicated by two complete bowls purchased by Dr. Soriano, the rim fragments, base fragments, and some of the body fragments. Since most of the fragments are relatively small, it is not possible to give a detailed analysis of these shapes, but some mention can be made of those suggested.

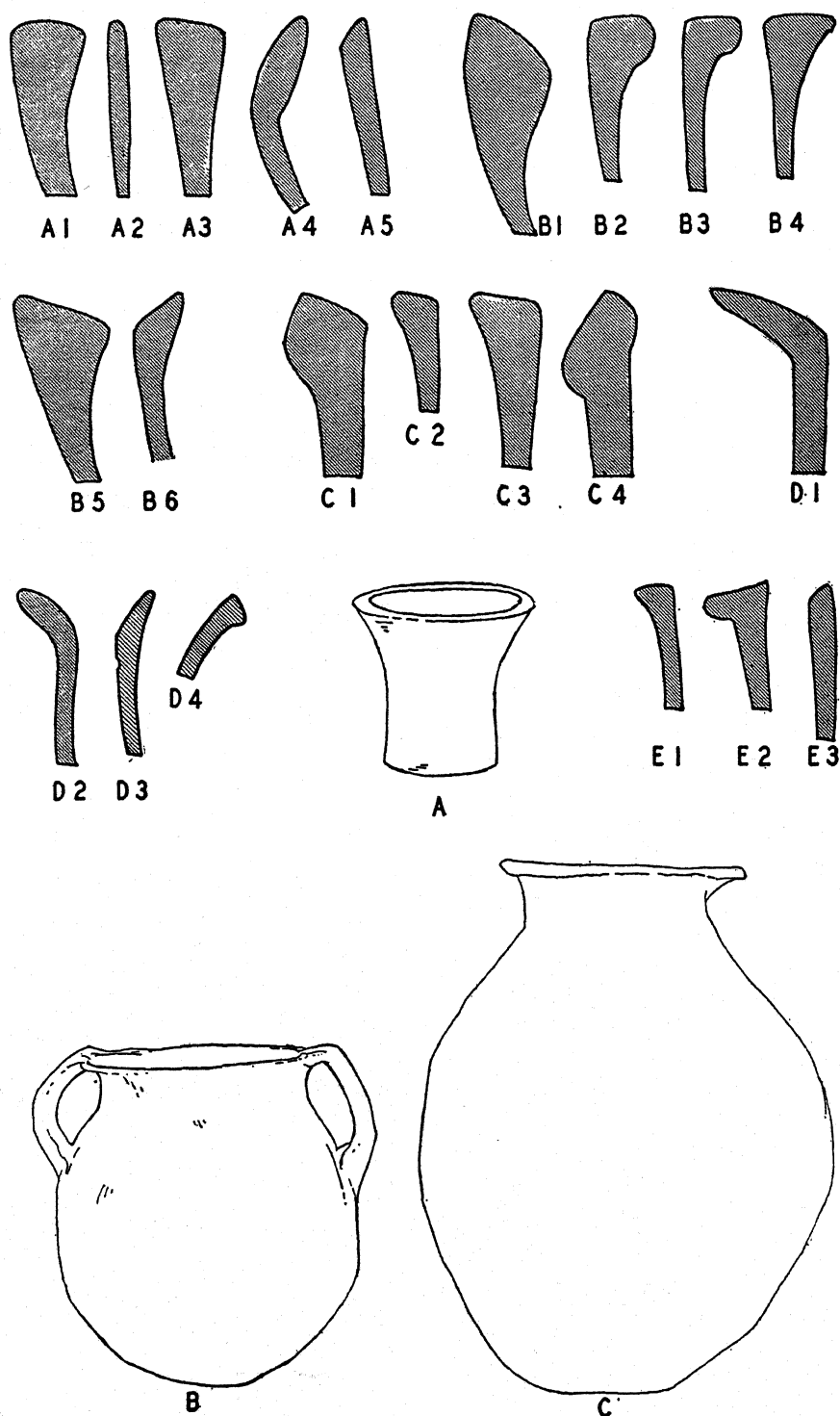


FIG. 28. Chavín style rim types and post-Chavín vessels from Chavín.

FREQUENCY AND PERCENTAGE OF  
CHAVÍN RIM TYPES

Type	Frequency	Per Cent
A Straight rims . . . . .	(186)	(35.98)
1 Thick . . . . .	18	3.48
2 Thin . . . . .	70	13.54
3 Wedge . . . . .	38	7.35
4 In-curve . . . . .	36	6.96
5 Bevel edge . . . . .	8	1.54
Miscellaneous . . . . .	16	3.09
B Bulge-in rims . . . . .	(190)	(36.75)
1 . . . . .	90	17.41
2 . . . . .	6	1.16
3 . . . . .	9	1.74
4 . . . . .	20	3.87
5 . . . . .	29	5.61
6 . . . . .	29	5.61
Miscellaneous . . . . .	7	1.35
C Bulge-out rims . . . . .	(40)	(7.74)
1 . . . . .	8	1.54
2 . . . . .	7	1.35
3 . . . . .	7	1.35
4 . . . . .	6	1.16
5 . . . . .	6	1.16
Miscellaneous . . . . .	6	1.16
D Flare-rims . . . . .	(63)	(12.19)
1 Angular flare-out . . . . .	8	1.54
2 Curve flare-out . . . . .	21	4.06
3 Angular flare-in . . . . .	18	3.48
4 Curve flare-in . . . . .	7	1.35
Miscellaneous . . . . .	9	1.74
E Spout or collar-rims . . . . .	(36)	(6.96)
1 . . . . .	16	3.09
2 . . . . .	5	.97
3 . . . . .	7	1.35
Miscellaneous . . . . .	8	1.54
F Flare-lip rim . . . . .	(2)	(.38)
Totals . . . . .	517	100.00

Open vessels form the bulk of the collection, at least 423 pieces belonging to this type. Most of the rims of categories A, B, and C are from open flat-bottom bowls with vertical, diverging, flare or convex sides and considerable variation at the rim edges. Only one fragment had an annular base, all others were flat. Base fragments represented three vessels with perpendicular sides; twenty had straight diverging sides meeting the base at an angle; eleven had convex sides meeting the base in a curve; six had flare sides; and one had a convex side with a projected base. Four surface pieces from one vessel indicated a bowl 11.5 centimeters high with flaring sides. Others are shorter, one section

measuring 2.5 centimeters high, another 2 centimeters.

One complete constricted-collar jar from the surface collections had a globular body 10.5 centimeters in diameter and 9 centimeters high, with a flat base 6 centimeters in diameter. The collar is straight and measures 4.5 centimeters high and 5.5 in rim diameter. The rim has a beveled edge of Type A5. Other fragments suggest seven more such vessels. A tall collar, with slight out-flare rim, is represented by four pieces, and four more show perfectly straight collars and plain rims. Twenty-five fragments suggest constricted-collar jars with flare collars.

Small globular bowls with angular-flare rims are represented by nine fragments, and two more pieces indicate straight-sided bowls with a rim at right angles.

Sherds definitely belonging to stirrup-spout vessels were not found, although 28 pieces seemed to be from spouts of some kind, and five more fragments might possibly represent the arcs of stirrup-spouts. None of the fragments showed the heavy spouts so characteristic of Coast Chavín, or Cupisnique, stirrup-spouts.

Doctor Soriano purchased a plain blackware vessel of goblet shape with annular base and diverging sides with plain edge rim.

Bowls with in-curving rims and convex sides, sometimes called yarn bowls, were represented by 44 fragments, and a variation on these with angular in-flaring rims adds eighteen more fragments.

Most body fragments are either from straight-sided bowls or globular vessels, but three indicated angular bodies, and one a square body with projecting edge. Variation on symmetrical shape was suggested by two rim fragments with definite flaring lips. A single piece of a redware modeled foot suggested a puma vessel like those at Wilkawain. This was found in Ch-12 with other Chavín sherds, but a chance for intrusion is possible. Otherwise modeled vessels were not represented. Two fragments of flat handles are probably intrusive, since handles are definitely not a characteristic.

As in the variation of wares and rims, shapes also seem limited to a few basic types with little divergence. This material is not from graves, which might make some difference, but in any case the uniformity throughout is noteworthy. In résumé:

Open vessels with rim variation and flat bases . . . . .	423
Straight constricted-collar jars . . . . .	16
Flare constricted-collar jars . . . . .	25
Goblet shape . . . . .	1 (complete)
Bowl with flare-rim . . . . .	11
Spout and possible stirrup-spout vessels . . . . .	33
In-curve rim yarn bowls . . . . .	44
In-flare rim yarn bowls . . . . .	18
Angular body vessels . . . . .	3
Flare lips on rims . . . . .	2
Modeled foot . . . . .	1
Handles (?) . . . . .	2

## DESIGN

Only 213 fragments or 7.12 per cent of the total collection showed any kind of design or decoration. Again it is noted that the variation in technique of decoration and the range of design are decidedly limited. Starting with design techniques, a brief résumé can be made, based on the frequency of occurrence. Since two techniques may appear on the same fragment, the totals are obviously greater than the actual number of decorated pieces.

## DECORATION TECHNIQUES IN CHAVÍN CERAMICS

Technique	Frequency
1 Fine line incision . . . . . (Linear, 30; circle, 15; dash, 3)	48
2 Groove or wide line incision . . . . . (Dull wide line, 112; circle, 26; sharp wide line, 3; extra wide groove, 3)	144
3 Positive painting . . . . . (Black and red areas separated by incised line)	6
4 Negative painting . . . . . (Orange and red)	1
5 Incised line with red paint fill . . . . .	2
6 Raised band . . . . .	1
7 Pierced holes . . . . .	1
8 Champlevé . . . . .	3
9 Punch and gouge . . . . . (Fine point punch, 8; dull gouge, 3; ratchet, 2; stamp punch, 8)	21
10 Relief . . . . . (Simple relief, 6; modeled face, 1)	7
11 Thumb-nail impression . . . . .	1
12 Rough scratch surface . . . . .	4
13 Raised tabs with incised cuts . . . . .	1
Totals of Technique Occurrences . . . . .	240

The decorated pieces themselves can be described in terms of their designs:

Nineteen pieces have fine incised linear designs. Of these seventeen have designs composed of single lines, parallel lines, or extremely simple combinations. One piece has an angular hook and bar, and one is decorated with two fine intersecting lines.

Four pieces have fine incised lines which form complex designs. On one large piece a rectangular area contains a double-line figure-eight design in the center with two triangles on either side of it. Within the triangles are small incised circles. A second piece has a zigzag line running across it, below which are a series of connected diamonds, each containing a rectangle and dot. A third piece from a rim section has an incised design of an inverted stylized Chavín feline head (Fig. 29l). The last piece has a geometric design with the lines filled with red paint.

Ninety-six pieces are decorated with grooves, in contrast to the fine line incision. Eighty-six of these have straight or curvilinear grooves made with a dull pointed instrument. Of the remaining ten pieces, one has a zigzag groove between two parallel lines (Fig. 30h); one has a double diamond design; one has two interlocking angular lines; one has a horizontal line below which are vertical grooves (Fig. 29q); three have exceptionally wide grooves; and one has a sharp cut groove.

Five pieces are decorated with complex groove designs, consisting of curvilinear figures, although none of these can be specifically identified (Fig. 30i, j). Eighteen pieces are decorated with combinations of grooves and other designs as follows:

- 3 Grooves and fine point punch design
- 1 Groove and dull gouge marks (Fig. 29m)
- 2 Grooves and semicircular punch units
- 2 Circles between parallel grooves (Fig. 29e, j)
- 2 Combination of parallel grooves and small circles (Fig. 29i, k)
- 5 Combination of curvilinear groove lines and small circles (Fig. 30e)
- 1 Grooved circle and rectangular punch marks (Fig. 29b)
- 1 Grooves and gouge marks, possibly representing a simple human figure
- 1 Grooves plus a triangular area

Thirty pieces are decorated with circular designs. Two have incised circles arranged in rows (Fig. 29c). Four have incised circles, each with a dot in the center (Fig. 29a). Eight have grooved circles, each with a dot in the center

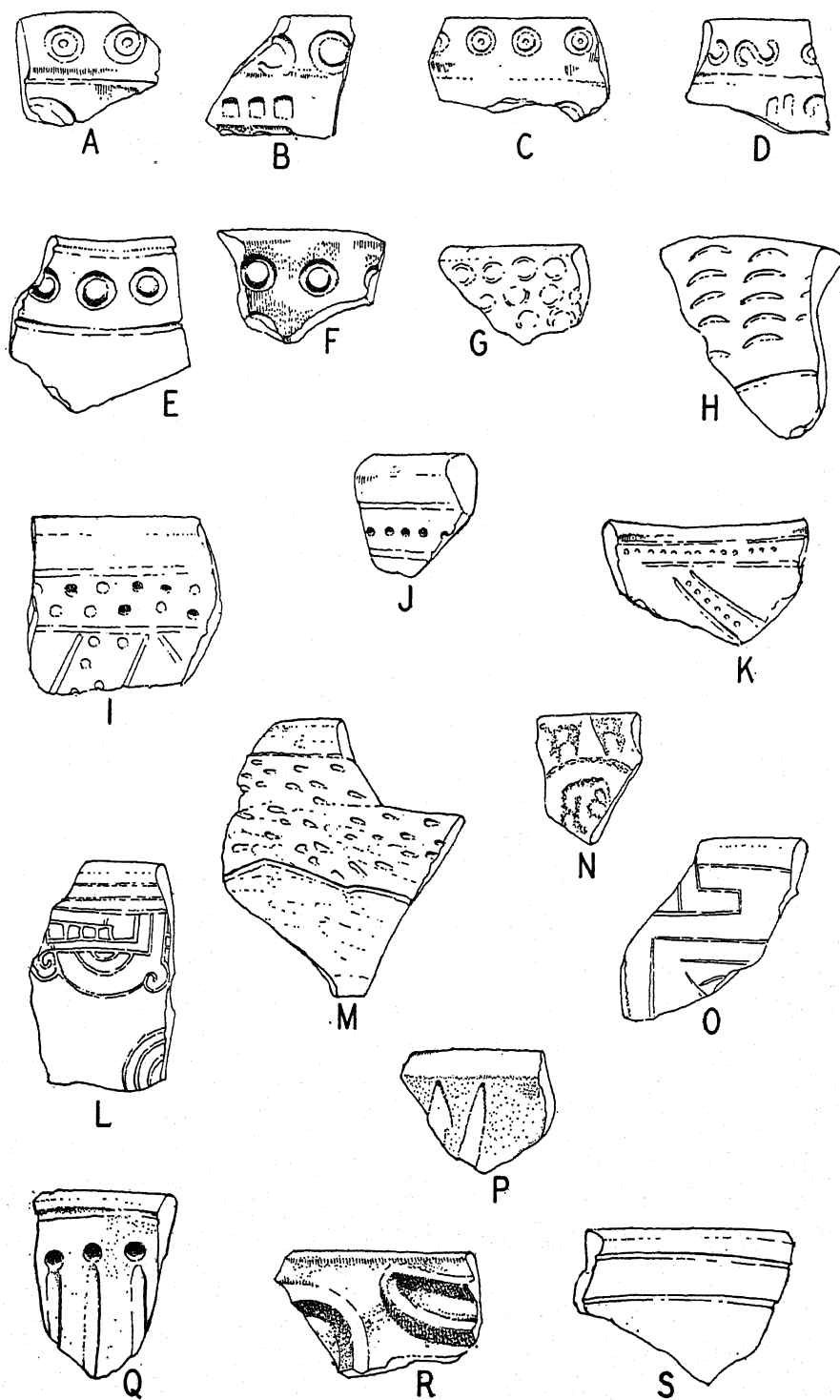


FIG. 29. Chavín style decorated sherds from Chavín.

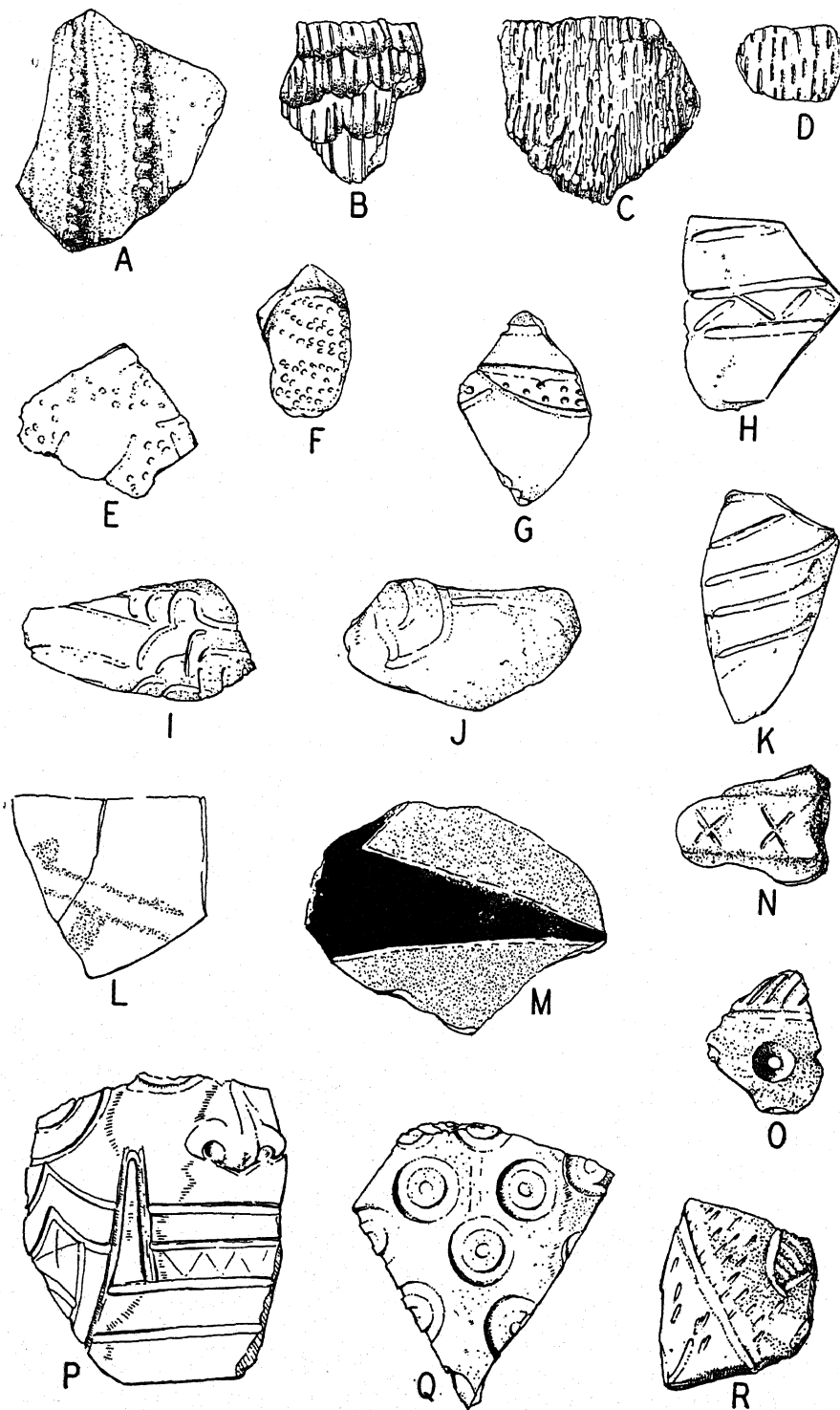


FIG. 30. Chavín style decorated sherds from Chavín.

(including one in which the grooves are filled with red paint [Fig. 30q]). Two pieces have a single line of small incised circles. Four have a simple groove circle. Ten have designs composed of two concentric groove circles.

Eighteen pieces are decorated with punch, gouge, or stamp marks. Of these, three have fine point punch marks; one has a square punch design; one has simple gouge marks; one has fine punch dots between incised parallel lines; two have a rectangular ratchet impression, in one case combined with fine point punch marks; one has a design made with an angular U-shaped stamp; three have designs made with an S-shaped stamp (Fig. 29d); one has punched holes which perforate the piece (Fig. 30o); one is decorated with a thumb-nail impression (Fig. 29h); three have rows of short dashes (Fig. 30d); and the final piece has a row of long dashes.

Nine pieces have relief design. All but one of these designs are comparatively simple: two have simple ridges (Fig. 30a); one has a raised band (Fig. 30n); two have relief ridges forming curvilinear designs (Fig. 29r); one has relief crescent shapes; one has relief rows incised with chevrons, separated by incised circles; and one has rows of raised tabs, each of which has three vertical cuts on top (Fig. 30b). The one complex piece has a modeled human face with relief nose and eyes and an incised mouth with double crossing fangs (Fig. 30p). It is a well-finished fragment and one which closely approaches the Chavín stone carving style of design.

Four pieces are decorated with rough scratch (Fig. 30c).

Seven pieces are painted, one possibly in negative technique (Fig. 30l). The other six have positive painted red and black areas separated by incised lines or grooves (Fig. 30m).

Three pieces have geometric designs in champlévé technique (Fig. 29n).

Two hundred and thirteen decorated pieces in total.

The frequency of the design elements as such is summarized in the following table.

OCURRENCE OF DESIGN ELEMENTS IN  
CHAVÍN CERAMICS

Design Element	Frequency
Linear incised or groove . . . . .	90
Curvilinear . . . . .	48
Dash . . . . .	3
Complex figure . . . . .	5

Raised ridge . . . . .	4
Diamond . . . . .	2
Rough scratch lines . . . . .	4
Circles . . . . .	41
Painted areas . . . . .	6
Punch dot . . . . .	8
Punch square . . . . .	1
Open circle . . . . .	4
Cross . . . . .	2
Angular U . . . . .	1
Zigzag . . . . .	2
Gouge oval . . . . .	3
Figure eight . . . . .	1
Triangle . . . . .	2
Dash or broken line . . . . .	3
Horizontal S . . . . .	3
Rectangle . . . . .	2
Short arc . . . . .	1
Loop . . . . .	1
Face . . . . .	1
Chevron . . . . .	1
Angular hook . . . . .	1
Band . . . . .	1

#### CHAVÍN ARCHITECTURE

The ruins have already been generally described. The following résumé is intended to stress certain architectural features which characterize the Chavín style.

#### SYMMETRY IN PLAN

The general appearance of the Chavín ruins as a whole is one of attempted symmetry. That this is not totally achieved is obvious from the sketch plan, particularly in reference to the two outlying northern mounds, Units C and H. Considering the remaining units, however, it is seen that the square plaza (Unit E) is flanked by two roughly equivalent platforms, Units F and G, and backed first by the terrace (D) and then by the main, virtually square Castillo, Unit A. Likewise, the interior arrangement of rooms and galleries within the Castillo follows a symmetrical plan.

#### THE MASS EFFECT

The platform type units which make up the Chavín ruins give a definite effect of mass. First, the platforms in groundplan and height are large in gross size. The high solid east wall of the Castillo is somewhat inclined and broken near the top by two step-back terraces, but the appearance is that of a great block, not of a stepped pyramid. No windows or other openings break this effect.



The two platforms, Units F and G, have sometimes been called forts, but none of the details normally found in fortifications are present. In spite of the great mass of building, the effect of fortification is not conveyed.

#### CONSTRUCTION NOTES

The general technique of construction is one of planned interior galleries and vents, lined and covered with stones, and an exterior facing wall of stone, with the remaining interior filled with rubble and capped with clay. The large mass platforms thus built up serve, in the Castillo, as a base for house construction. All platforms are flanked by low terraces. The height of some of the units is attained by inclining the facing walls and setting back terraces near the top. Corners are well finished, in both the dressed and the rough stone walls. Slabs covering wide rooms or galleries are reinforced by stones which project inward from the top of the side walls, although the corbeled arch itself is not employed.

#### STONEMWORK

Carefully dressed stone slabs form the facing of much of the Castillo, Unit A, and part of Unit B, but are not seen in other parts of the ruins, and never in the interiors. The stone is skilfully dressed, but such Tiahuanaco features as niche joints, tenon joints, and copper cramps are not employed.

The standard facing technique is to set stones in horizontal rows, alternating wide and narrow courses. This applies to the split stone walls of the interior gallery as well as the dressed stone facings, although the rougher slabs required small stones to fill the intervening chinks. While all walls are not equally well faced, the technique shows no major variation. The Tiahuanaco facing style of upright slabs set at intervals with small stones between is not found.

Selected and split stone is used in the interior and on some outer facing walls. Large stone slabs are used as gallery covers.

#### GALLERIES

The internal galleries, small rooms and the connecting ventilation shafts are the outstanding characteristics of Chavín construction. While these have been sufficiently described in this report and elsewhere, such details as

the three or more floors of galleries, the wall niches, the connecting ramps and stairways should be noted.

#### MISCELLANEOUS DETAILS

Several details which need no elaboration here but which are useful for comparative purposes should be mentioned: first, the projecting decorated cornice still to be seen at the southwest corner of the Castillo; second, the carved heads set into the walls with tenons; third, the presence of a carved stone within one of the galleries; fourth, the house foundations with their dressed stone walls on top of the Castillo. These are the only free standing walls found around the ruins. Other house sites were not seen, unless the small cells between the plaza and the river are so considered. Fifth, the steps leading up the east face of the Castillo, and a set of monolithic steps near the river bank should be mentioned, as well as a dressed canal stone near the river bank. Small canals in various sections of the ruins might well have served for drainage.

#### STONE CARVING

Our excavations at Chavín did not uncover any carved stonework, nor did they add materially to the existing knowledge of this important aspect of Chavín culture. Illustrations of 72 pieces of stone carving, all probably from the ruins, were assembled. Some of these were seen and photographed by us, some have been published by Julio C. Tello, some were photographed by Donald Collier, and many others were traced by Humberto Hidalgo who sold copies of the drawings to us. The 72 pieces can be grouped as follows:

25 Heads carved in the round (Pl. 8b, c), including twelve representing human heads with tenons for wall attachment, and 13 representing animal heads, all but one (Pl. 8a) of which have tenons

33 Flat slabs with incised design, of which 17 may be cornices, like the one still in position in the Chavín Castillo

8 Flat slabs which appear to be parts of stelae like the Raimondi Stone or the Tello obelisk

1 *Lanzon*, with carving in the round, still in position in the Chavín gallery

5 Pieces so different in style as to be classed as non-Chavín in spite of being found in the region

Twenty-six of the above pieces had been illus-

trated in the literature before our expedition<sup>1</sup> and in a recent publication<sup>2</sup> of 30 of Humberto Hidalgo's drawings, 24 new ones are included. This total of 50 illustrated pieces furnishes an excellent basis for a study of Chavín stone carving style. Julio C. Tello has published<sup>3</sup> a detailed analysis of Chavín stone carving style, particularly in reference to four outstanding pieces. As a preface to the Hidalgo drawings<sup>4</sup> an analysis of stone carving design elements is presented. Other discussions of Chavín style can be found in Means,<sup>5</sup> Kroeber,<sup>6</sup> and elsewhere. Consequently, only a brief résumé is included in this report.

Chavín carving is divisible into two categories: carving in the round and flat carving. Exceptions to this rule are few and not of major importance. The carving in the round is largely limited to human and animal heads with tenons for wall insertion. Both types have been adequately described in the literature cited above. It is interesting to note that none of the Chavín carvings can properly be called a statue. This is an outstanding contrast to the Callejón de Huaylas with its numerous stone statues.

Flat surface carving is definitely related to that in the round. The techniques are low relief, champlévé, and incision. The styles range from the completely curvilinear, through combinations of angular and curvilinear, to a rare angular design. Other generalized characteristics are symmetry and a tendency to fill the surface space by elaboration of design detail.

As has been frequently pointed out, the feline

concept dominates all of Chavín design. Only in the one group of carved heads is the human being depicted. Otherwise the feline figure is universal, either as the main design in profile or in zoomorphized front view, or as the basic figure with appendages attached, such as bill and wings for a condor, undulating body for a snake, tail and fins for a fish. In decorative design detail the feline appears most frequently and with considerable variation, but can be recognized in profile, front and top view. Even more limited design elements seem to be derived from feline eyes, ears, whiskers, tongue, and teeth. In no other Peruvian art style is a single design concept so dominant.

The brevity of the present discussion of Chavín stone carving is not to be taken as indicative of its importance. For the most part, Chavín stone carving is known from the site itself, although Tello<sup>7</sup> reports the style from the provinces of Huari, Pomabamba, and Pallasca, and future exploration may widen the distribution still more. On the other hand, the stone carving design is the chief diagnostic of the Chavín period. On the coast of Peru materials with Chavín stone carving design are varied and numerous. Thus the design appears on incised clay walls at Nepéña, on ceramics at many sites on the North Coast, on goldwork at Chongoyape, and on small objects of shell, bone, and stone from many sites. In fact, the numerous recent discoveries indicate that Chavín stone carving style is one of outstanding importance in Andean archaeology.

## POST-CHAVÍN MATERIALS

Definitely post-Chavín materials were found in eleven of the sixteen sites as well as in surface collections (Sites Ch-1, 2, 3, 4, 5, 8, 11, 13, 14, 15, 16). Post-Chavín materials are represented in several categories:

**Constructions.** Rough stone division walls were found in Pits Ch-2 and 16; rough stone

<sup>1</sup> Borchers, 1935, 352; Larco Hoyle, 1938, Fig. 25; Tello, 1923, Figs. 59, 70, and 77, and Pls. I, II, III, IV; Tello, 1929, Figs. 22 to 38 inclusive; Roosevelt, 1935, Fig. 29.

<sup>2</sup> Bennett, 1942, Figs. 1 to 30 inclusive, of which Figs. 1, 2, 3, 6, 7, 8 have been previously illustrated.

<sup>3</sup> Tello, 1923, especially 256 to 320.

<sup>4</sup> Bennett, 1942.

<sup>5</sup> Means, 1931, 139-144.

<sup>6</sup> Kroeber, 1926, 36-39.

facing walls with window niches in Pit Ch-3; a baked clay plastered house in Pit Ch-3; walled pits with slab covers in Pits Ch-3 and 16; and a small canal in Pit Ch-3.

**Graves.** At least 31 graves are represented, including ten clearly of the stone box type. These were found in Pits Ch-13, 14, and 16. Eighteen of the graves were without definitely associated contents, and the remaining 13 contained a total of 25 vessels and three spoons.

**Sherds.** A total of 4306 sherds from the 11 sites with post-Chavín materials are available for analysis.

<sup>7</sup> Tello, 1923, 256.

Miscellaneous artifacts of post-Chavín style were found, including 14 stone objects, 15 bone objects, three clay whorls, and a shell.

Stone sculpture of post-Chavín style was not encountered. Some pieces of stone carving from Chavín can be called non-Chavín style, and possibly these represent a later period. The absence of positive evidence, however, makes it preferable to omit these from consideration here.

No materials suggesting a pre-Chavín horizon, nor even styles contemporaneous with Chavín were found. The materials here discussed are all definitely post-Chavín by virtue of stratigraphic position in some pits, grave intrusion into the Chavín construction in others. The styles represented present no discrepancies with this interpretation.

All of the materials, the construction work as well as the ceramics, are not only post-Chavín in temporal position, but definitely non-Chavín in style. None presents the slightest indication of Chavín influence.

Treated as a whole, for the moment, the post-Chavín ceramics are predominantly plainwares. The 25 complete vessels include 13 plain orange or crude brown, two polished red, and ten with one-color design on a slip background. The 4306 sherds can be grouped as follows:

- 3766 Plain brown, orange, gray
- 285 Polished monochrome red, black, brown, orange
- 215 One-color on slip background
- 33 Pieces of San Jerónimo painted style in which interior colors and combinations differ from exterior
- 5 Pieces with two colors on slip background
- 2 Negative painted pieces (two-color)
- 4306 Total

Direct stratigraphy in reference to the post-Chavín materials proved of little significance. The materials from Pit Ch-2 were segregated into six arbitrary levels, and Pit Ch-3 was divided into three levels. These arbitrary divisions have no significance in terms of the materials. Considering the pits as units, certain differences can be pointed out, but their ultimate temporal significance cannot be finally determined. Most of the materials do not seem of sufficient importance to warrant detailed analysis. Consequently, the recognizable styles are discussed below and the majority of the plainware sherds are omitted from major consideration.

## POST-CHAVÍN CERAMIC STYLES

The post-Chavín materials lack two of the important Huaraz styles, namely, Recuay and Wilkawain-Tiahuanacoid. No three-color negative fragments, modeled pieces, trumpets, short spouts, modeled figure pieces, or any other positive suggestion of Recuay style occur in the excavated collection. The Recuay style is represented in collections from the pueblo of San Marcos, so its absence from the Chavín collections is not indicative of any limited distribution of Recuay. Likewise the Tiahuanacoid style, found in such abundance near Wilkawain, is not clearly represented at Chavín. Tiahuanacoid designs are not found. While some simple one-color on slip pieces, such as black-on-red, red-on-orange, might conceivably be Tiahuanacoid, only five pieces of two-color ware were found and of these only one was the typical black, white-on-red. Three-color wares were not represented. (These statements about two- and three-color ware do not include those fragments of the San Jerónimo type.) Furthermore, such associated characteristics of Wilkawain as two-color negativeware, double-spout black and redware, modeled pumas and the like, are not represented in the collection. Both a Recuay and a Tiahuanacoid style should be found in the region, and thus it is obvious that our Chavín excavations give a very incomplete picture.

## INCA STYLE

The pair of redware goblets (Fig. 28a) found in Ch-3A are good Inca types, although they lack painted design. No other pieces, either complete or fragmentary, represent the Cuzco-Inca typical design or shapes.

## SAN JERÓNIMO STYLE

A surface collection from San Jerónimo, near Huaraz, has already been described. The style appeared to be Inca-influenced, characterized by change in color combinations on the inside and outside of fragments. Similar pieces were found in the sherd collections from the Chavín Pits Ch-2, 3, 4, and 16 (see Fig. 31a-p for style). At San Jerónimo these painted pieces had a surface association with brown, yellow, gray, red, and black fragments, as well as white-on-red, black-on-red, red-on-orange and black, white-on-orange. All of these associated types are also found with the painted style at Chavín. Although we cannot insist that all fragments

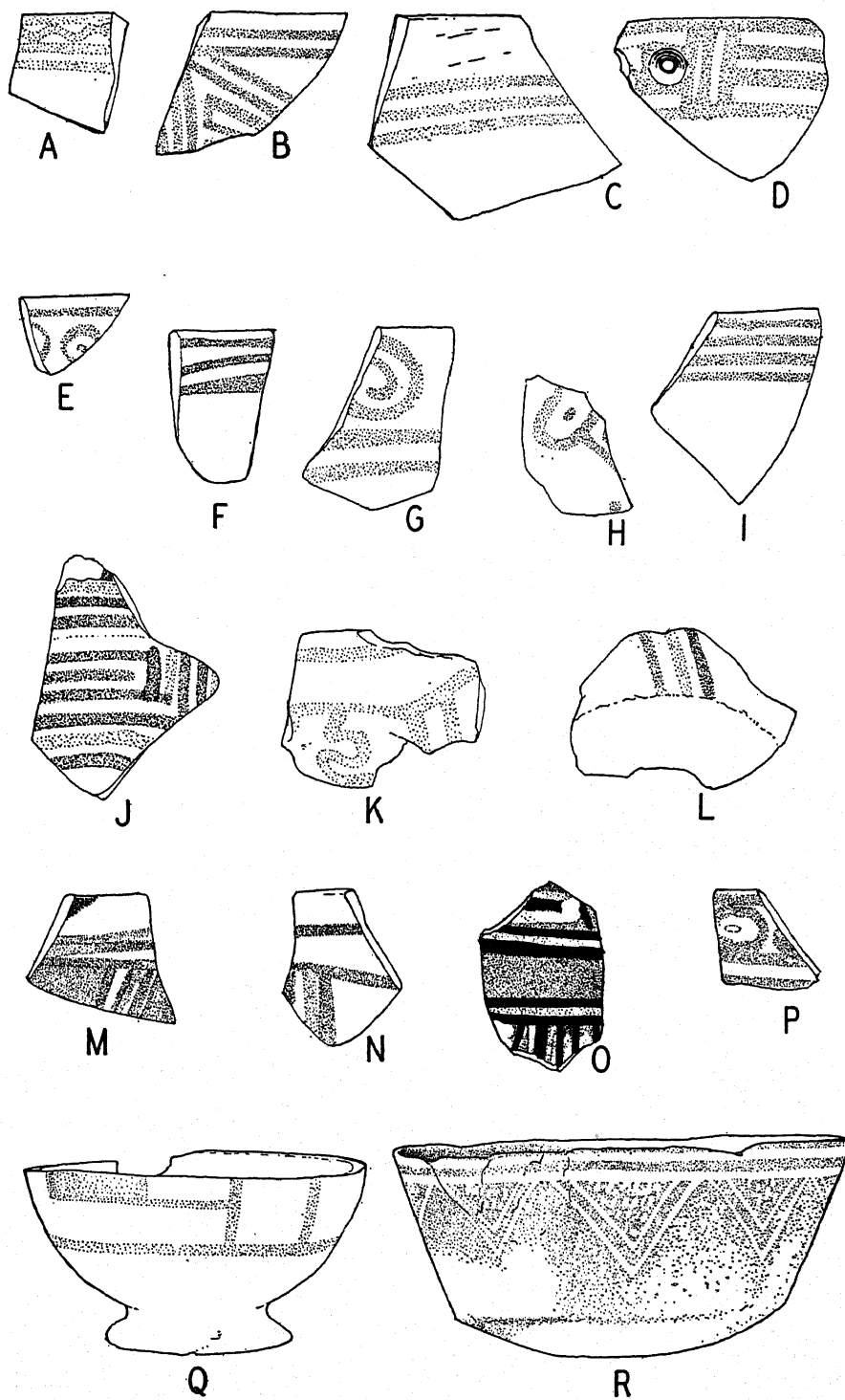


FIG. 31. Post-Chavín ceramic styles from Chavín and San Jerónimo.

associated with the San Jerónimo style at Chavín are contemporaneous, it does appear that the bulk of the collection from Pits Ch-2 and 3 (2941 fragments in total) belongs to a Late style, probably of about Incaic time. This is confirmed in part by the pirca facing walls of Pit Ch-3. Likewise, the grave pieces from Ch-3 do not disturb this analysis, since, aside from the two Inca goblets of Ch-3A, only crude ollas (Fig. 28b, c) and spoons are included.

#### WHITE-ON-RED STYLE

A grave, Site 7H-15, at Wilkawain contained a series of vessels which isolate a white-on-red style. This same style occurs at Chavín in intrusive graves in Ch-13 and 14 (seven complete [Fig. 31r] or partially complete open vessels plus some fragments), and in Ch-16 (one complete and some 20 fragments from open vessels). Perhaps the fragments of seven other vessels from Ch-11 should be included, and likewise the ten small fragments from Ch-3.

The shapes of these vessels are all variants on open-bowls. These include a plain rim bowl with straight diverging sides and a rounded base; a similar bowl with slightly converging sides; a plain rim bowl with convex sides; a flare-rim bowl with convex sides; and a somewhat plate-like vessel. Of the fifteen complete or partially complete bowls which might be grouped into this style, three have white-on-red design, eight are plain orange, two are red, one black, one red-on-white, and one red-on-orange. The twenty fragments from Ch-16 are all white-on-red designed. The decorated vessels, then, show combinations of straight horizontal, vertical, and diagonal lines; wavy lines; triangular areas filled with dots; and circles.

The white-on-red is definitely post-Chavín. It is isolated in the graves of Ch-13 and 14. Both white-on-red and San Jerónimo style were found at Ch-16 in the upper meter, but definite stratigraphy was not possible.

Recent excavations by Gordon Willey at Chancay are giving new importance to the Chancay white-on-red style. The white-on-red of Chavín and Huaraz show certain similarities to the Coast style. If new evidence enhances the significance of these similarities the position of white-on-red as post-Chavín will be of impor-

tance in checking Coast sequences in which a Chavín style is also involved.

#### MINOR STYLES

The remaining post-Chavín material is not too distinctive. The following minor styles are mentioned, although the final significance is unknown.

#### RED-ON-ORANGE

The two graves of Ch-8 contained two shallow plate-bowls, one orange and one with a wavy red line on an orange base; a toy-like olla with a red band on an orange base and a two-handled orange olla. Red-on-orange fragments occur also in Ch-2 (13 pieces), Ch-3 (two pieces), Ch-4 (four pieces), Ch-5 (two pieces), and Ch-16 (five pieces). The general position is that of a Late style.

#### RED-ON-WHITE

An open, plain-rim bowl with annular base was found in Ch-5 (Fig. 31q), together with a crude brown jar. The open-bowl was decorated with red bands on a dull whitish base. Fragments of vessels of similar shape and design were found in Ch-2 (14 pieces), Ch-3 (five pieces), and Ch-4 (two pieces). Again the associations suggest this as a Late style, in spite of superficial resemblance to one type of Recuay vessel.

#### OTHER POST-CHAVÍN ARTIFACTS

Eleven miscellaneous artifacts found in Ch-2 and Ch-3 apparently belong to a Late period. These include half of a circular stone with a depression on each side, a ring stone, and a grooved stone bead; a cut knuckle bone, two deerhorn points, and three polished bone points; a flat disc clay whorl; and a seashell. In Ch-14 a leaf-shaped stone knife and part of another, plus a pierced flat stone, might possibly be part of the white-on-red period.

The 19 miscellaneous objects of Ch-16 are probably of a Late period, since most came from the upper meter, although this is not certain. The stone objects are a flat ring stone and part of another, a pierced ball club head, a polished T-shaped ax, a rough chipped ax, a piece of a bowl, a long thin knife, and a fragment of obsidian. Bone pieces are a spoon, three points, a needle, a knife, and three polished pieces. Two flat disc clay whorls were also found.

### PART 3. THE NORTH HIGHLANDS

SINCE 1938 WHEN THESE EXCAVATIONS were effected, Peru has become the scene of intensive archaeological activity. Julio C. Tello has carried out considerable exploration in many parts of Peru, including the Callejón de Huaylas and Chavín. Rafael Larco Hoyle has directed extensive excavations in Chicama, Viru, Santa, and other coastal valleys. He has uncovered numerous new graves of the Chavín type and has isolated a new style of material called "El Salinar." Other Peruvian archaeologists such as Luís E. Valcárcel and Augusto Soriano Infante have continued their archaeological work. The 1941 program of the Institute of Andean Research brought many new archaeologists into the field and allowed several others to return again. Theodore McCown excavated in the North Highlands, principally around Huamachuco. Duncan Strong, Gordon Willey, and John Corbett worked at many points along the Central Coast including Chancay, Supe, Ancon, and Pachacamac. A. Kidder, II, and John Rowe continued their work at Cuzco and at Pucara. S. K. Lothrop and Marshall Newman ran a program which included surveys and a careful study of skeletal material. More recently A. L. Kroeber returned to Peru for special studies in the field of archaeology. The work of all of these scholars bears directly on the problems encountered in our excavations in the Callejón de Huaylas and at Chavín. While some of the work has been published, much of it is still in the process of preparation. As a consequence detailed conclusions and elaborate distribution studies of the materials which we found in the Callejón de Huaylas and at Chavín are impractical at this time. A careful review of the total materials involved is obviously needed, but this must wait until these important new discoveries have been published. In the light of these facts, the final section of this paper is nothing more than a résumé of our own work done in 1938, plus some general observations on the Callejón de Huaylas and Chavín and few comparative notes. The essential value of this report lies in the descriptive sections already presented, and we are aware that any but the most generalized conclusions would be outdated even before they appeared.

The material resulting from our excavations falls largely within those broad Peruvian time categories called "Early" and "Middle" periods, plus a certain amount of material which might be classed as "Late" period and Inca. Three distinct styles fall into the Early period category. These are Chavín, Recuay, and the white-on-red styles. The excavations at Chavín demonstrated that the white-on-red style was post-Chavín, but we encountered no evidence for the relative positions of Chavín and Recuay or Recuay and the white-on-red. At Wilkawain, Recuay materials were found stratigraphically under the Epigonal or Tiahuanaco-influenced style. Since the latter generally characterizes the Middle period everywhere in Peru, the placing of Recuay in the Early period is justified. The white-on-red style is classed as an Early period because of its position on the coast of Peru in pre-Tiahuanaco levels. A Chavín style has now been found on the coast of Peru in positions apparently older than the Mochica or Early Chimu period. There is some slight evidence that the white-on-red style might also be pre-Mochica. Judging by this comparative evidence, the sequence of the Early period styles in the Highlands of Peru would be Chavín, white-on-red, and Recuay, although this order is not definitely confirmed by direct evidence from our excavations.

The great bulk of the material we found around the site of Wilkawain belongs to the Middle period because of the obvious Tiahuanaco influence. Still other Tiahuanaco-influenced styles are found in many of the local collections in the Callejón de Huaylas. The Middle period, then, can be divided into a Wilkawain-Tiahuanaco and an "Epigonal," although evidence for the order in time of these two is missing. Late periods are poorly represented in our collections. While a great mass of material was encountered in a Late position at Chavín none of it represents any clearly defined style. Finally, a certain amount of material seems to correspond in a generalized way to the Inca period. The résumé which follows is arranged in this general chronological order of Early, Middle, and Late periods.

## CHAVÍN AS A WHOLE

Our excavations at the site of Chavín, plus study of other materials, reveal a Chavín period followed by a series of post-Chavín styles, the most important of which seem to be the white-on-red and an Inca-influenced style.

The Chavín period at its home site is represented by an architectural style, a stone carving style, and a ceramic style. With the exception of a fragment of an open stone bowl, other type materials pertaining to this period were not found in our excavations, although it is logical to assume that new excavation will produce more evidence, including gold objects. The stone carving is definitely associated as parts of some of the buildings. The ceramics are included by virtue of their exclusive claim for

antiquity among the materials excavated by us, and by certain associations with architectural features. In many ways the ceramic design is a decided contrast to the stone carving design. That further excavation might reveal ceramic designs as similar to the Chavín stone carving style as the Cupisnique pieces in the Larco Hoyle Collection at Chiclé Museum is, of course, possible. On the other hand, both the Early Ancon and Puerto de Supe ceramic styles tend to confirm the validity of a Chavín ceramic style as distinct from the stone carving.

While sufficient description of the major features of the Chavín site have been given in that section, a brief résumé follows, for convenience of comparison with other sites.

## ARCHITECTURE

1. Platform construction of massive type, in which the effect of mass is gained by windowless walls and unbroken terraces.

2. Interior rooms and galleries arranged on three or more floor levels.

3. Stone-lined ventilating shafts.

4. Planned construction based on building the stone-lined and slab-covered rooms, galleries, and vents and exterior facing walls and filling the space in between with rubble.

5. Dressed stone facing walls and corners.

6. Building technique of horizontal rows of slabs, alternating thick and thin. Chinks are filled with small stones. The horizontal row technique is employed both in the well-dressed stones and in the split stone.

7. Symmetry of general plan.

8. Orientation following roughly on east to west and north to south alignment.

9. Complexity of total site including arrangement of buildings, courts, terraces, and the like.

10. Free standing walls only as foundations of houses.

11. Grooved canal stones.

12. Stairways and steps cut out of single blocks.

13. Projecting carved cornices and carved heads inserted in walls.

14. Sunken court or plaza.

15. Small cell-like rooms apart from the main buildings.

## STONE CARVING

1. Carving in the round and on flat surfaces.

2. Human and feline heads carved in the round with tenons for wall insertion (Pl. 8b, c).

3. One head carved in the round, but without tenon (Pl. 8a).

4. No true statues. No depiction of human being except for carved heads.

5. Dominance of feline motive, particularly in the flat carving. The feline is represented as the main figure in profile head, profile body, and anthropomorphized front view. The feline figure forms the basis for depiction of condor, fish,

and snake figures. Design detail emphasizes the feline features in decorative units representing profile, front view and top view heads, plus other feline-derived units.

6. Design style ranging from curvilinear to angular.

7. Flat carving technique of incision and champlévé, but always low relief.

8. Design highly stylized and flamboyant.

9. General tendency for symmetry in design.

10. Emphasis on detail and filling of total available space.

## CERAMICS

1. Well-polished monochrome wares, including black, brown, red, and orange.

2. Some black and redware with color areas separated by incisions.

3. Great rim variation, emphasizing thick rim edges, beveled rim edges, and bulging rim edges.

4. Shapes dominated by variations on shallow open-bowls with flat or slightly rounded bases, and convex or flaring sides. Other forms include a constricted-collar jar, a globular bowl with flare-rim, and some spouted vessels possibly representing stirrup-spouts. Annular bases, tripod bases, and handles are not found.

5. Design dominantly fine-line and groove incision, but also includes punch, gouge, scratch, champlévé, raised strips, and tabs. Positive color painting limited to two colors. Highly questionable negative painting. Modeling occurs, but is rare.

6. Designs are largely geometric in pattern,

such as lines, circles, triangles, angles, S-shapes, and the like. Some more complicated curvilinear designs, but designs paralleling those on the stone carving are not common.

These brief summaries may not give an adequate picture of the Chavín materials. It can be said, however, that architecture, stone carving, and ceramics are all easily distinguishable in Peruvian materials. In spite of this fact the combination of the three at the site of Chavín is, to my knowledge, unique in the Andean region. One cannot be certain that Chavín de Huántar represents the center of distribution of the Chavín culture and style. In fact Larco Hoyle (1938) is inclined to believe that it is a Highland manifestation of an essentially Coastal period. Whatever the final answer may be, Chavín is, so far, the most elaborate manifestation of Chavín style as a whole and stands isolated.

## CHAVÍN COMPARISONS AND DISTRIBUTION

In a former paper<sup>1</sup> a brief discussion of the Chavín distribution problem was given. In a more recent publication<sup>2</sup> the problem was reviewed in the light of numerous new discoveries. It is not necessary to repeat these discussions here, but certain new points may be considered in reference to the excavations at Chavín itself. The comparisons which follow refer to the architectural style, the stone carving style, and the ceramic style.

## CHAVÍN IN THE NORTH HIGHLANDS

The area of the North Highlands is obviously the most logical place to seek further evidence of Chavín. Unfortunately little work has been done and still less evidence published. Julio C. Tello reports Chavín-style finds in many sections, but his published evidence has not yet appeared. Augusto Soriano Infante collected Chavín ceramic fragments near the town of San Marcos, not far from Chavín itself. Otherwise, this important aspect of the Chavín distribution problem must await further discovery and clarification.

<sup>1</sup> Bennett, 1939, 127-133.

<sup>2</sup> Bennett, 1943.

Since the majority of definite Chavín-style finds have been made on the coast of Peru one would naturally expect that the Callejón de Huaylas, being geographically between Chavín de Huántar and the coast, would be a key region in the distribution problem. Doubtless it will be, but up to the present little evidence of Chavín in the Callejón has been presented. Of the known ceramic styles, stone carvings, and architectural features of the Callejón, only the last category has much bearing on the problem. The ceramics seen by this expedition were definitely non-Chavín in style. While the Callejón contains much stone carving, only the carved puma heads with tenons for wall insertion might be said to resemble Chavín heads, and even in these, the style is distinct. In the three-storied temples, such as those described at Wilkawain and Ichik-Wilkawain, one finds the closest parallels. The Wilkawain temple had three floors of galleries and rooms with a built-in vent system. Cornices and projecting carved heads decorated the outer wall. The walls of split stone were laid in the horizontal technique of Chavín. One feels that some relationships exists, but in the absence of other



supporting material it is impossible to define it with accuracy.

#### CHAVÍN AND TIAHUANACO

Most Andean archaeologists have been impressed by the fundamental resemblance of Chavín and Tiahuanaco. There is, however, considerable disagreement in the interpretation of this resemblance. Thus, Joyce, Posnansky, Markham, González de la Rosa, and Means argue that the Chavín style is probably later than that of Tiahuanaco. In fact, all of these men feel that Chavín is a highly stylized phase of the Tiahuanaco period. Means<sup>1</sup> sums up the argument in his comparison of the Raimondi Stone and the Viracocha figure on the Gateway of the Sun. He concludes that the two are unquestionably derived from the same fundamental concept. At the same time, he suggests that the differences are the result of mixing of Tiahuanaco style with Nazca and that the combination explains the Chavín style. Tello and Uhle take the opposite view, namely, that the Chavín style antedates that of Tiahuanaco. Uhle<sup>2</sup> states definitely that the Raimondi Stone is not a copy of the Gateway of the Sun but rather a stylistic predecessor. Muelle (1937) has summed up the argument on this problem. His own conclusion stresses the resemblance of Chavín carving, particularly the Raimondi Stone, and Nazca B style. In all these discussions the arguments are based on a comparison of stone carving, with little or no mention of architectural style or ceramics.

Both Chavín and Tiahuanaco represent aggregations of architectural features, buildings, platforms, and the like, arranged according to a large scale plan. Both employ well-dressed stone, stairways, grooved canal stones, and other similar features. Both have sunken courts and somewhat oriented units. Both have stone carving associated as an architectural feature, both in the form of low incised relief and sculptured heads. At the same time the differences are numerous. The built-up platforms with the interior rooms, galleries, and vents are characteristic of Chavín, but are not found at Tiahuanaco. While both use dressed stones in a facing technique, the Tiahuanaco style consists of upright pillars with small stones fitted in between, in contrast to the horizontal row

style of Chavín. Outstanding in Tiahuanaco architecture are the elaborately jointed and grooved stones employing copper cramps. These are not found at Chavín. From the point of view of architecture, then, the resemblances of Chavín and Tiahuanaco are generalized rather than specific.

In ceramics even a greater contrast is found. Here one can go so far as to say that there is virtually no resemblance between the polychrome Tiahuanaco pottery and the monochrome incised Chavín pottery. We are thus forced to return to stone carving as the only ground for the resemblance of the two sites.

Like Chavín, Tiahuanaco has sculptured stone heads (although these are usually on blocks rather than on tenons for wall insertions) and carvings in low relief on gateways and on flat stone. The chief difference is the occurrence of numerous statues at Tiahuanaco. While the feline figure, usually identified as a puma, is an important design in Tiahuanaco carving, the carving is not dominated by the feline concept as at Chavín; instead, human, bird, and snake figures play an important part. Without going into a detailed comparison, it still appears that the resemblance between Tiahuanaco and Chavín carving, from a stylistic angle, is generalized rather than specific.

The only concrete evidence for the chronological relationship of Tiahuanaco and Chavín occurs on the coast of Peru. Here there is no question that the Chavín style antedates, by considerable time, the distribution of Tiahuanaco style. While this in turn would suggest that Chavín as a whole was older than Tiahuanaco as a whole, it does not offer conclusive proof. In general formation one feels that both Tiahuanaco and Chavín are derived from the same fundamental concepts, but that these concepts are generalized Andean rather than specifically either Tiahuanaco or Chavín. At this time there is no good evidence to suggest that Tiahuanaco is another manifestation of Chavín, or the reverse.

The south highland Peruvian site of Pucara, which has been extensively excavated by Alfred Kidder, II, is thought by some archaeologists to bear a reasonably close resemblance to Chavín. At the same time the Tiahuanaco resemblances cannot be denied. Until Kidder's work is published no sound conclusions can be drawn in reference to Pucara.

<sup>1</sup> Means, 1931, 139.

<sup>2</sup> Uhle, 1920, 155.

## CHAVÍN AND COAST STYLES

In recent years a great mass of new evidence on Chavín on the coast of Peru has been accumulated by Larco Hoyle, Tello, Willey, Strong, and others. In the light of this mass of evidence, much of it still unpublished, it is inadvisable to draw conclusions at this time. Consequently, we will pass over rather briefly the consideration of this important aspect of the Chavín period.

## CHAVÍN AND EARLY ANCON

Early Ancon<sup>1</sup> materials come from a settlement refuse. No architecture or stone carving is available, and thus the comparison is between the small sherd collection and the ceramics of Chavín. Such a comparison shows an amazing similarity between Chavín and Early Ancon ceramics. Some points of similarity are listed:

1. Thick polished wares ranging from black through brown to red
2. Decoration by incision, in which groove incision is typical
3. Design detail similar, such as parallel lines, circles with dots, zigzag, punch areas, curvilinear grooves
4. Wide incised lines filled with paint (red, at Chavín; white, pink, and yellow at Ancon)
5. Two-color areas separated by incisions
6. Suggested shapes of Ancon similar to Chavín. Most pieces from open-bowls plus rim variation.
7. No stirrup-spout vessels suggested at Ancon (some are suggested in the Chavín collection, but certainly they are rare)
8. Dr. W. D. Strong reports rare pieces of negativeware at Ancon, and one rare piece found at Chavín
9. Stone mortar at Ancon like stone bowl of Chavín
10. No metals associated

Early Ancon has a figurine type and a stone club head not encountered in our Chavín collection. Even though the Early Ancon collection is small and further excavation is necessary, it seems clear that the relationship of Chavín and Early Ancon ceramics is remarkably close. The recent work of Willey at Ancon should clarify this situation.

## CHAVÍN AND PUERTO DE SUPE

The finds of Dr. Max Uhle at two sites near Puerto de Supe<sup>2</sup> include burials and numerous

objects besides pottery. The absence of stone carving or building styles leaves only the ceramics for comparison with Chavín, since at the latter site such perishable materials as baskets, nets, and textiles are not preserved. The ceramic collection is unfortunately small (eight whole pots, three fragments of one, and a few sherds), but even so it is amazingly similar to Chavín ceramics in thickness of ware, colors, shapes, incised decoration, and the like. Kroeber<sup>3</sup> states that the Puerto de Supe material is similar to but not identical with the Early Ancon. The differences are not obvious from the descriptions and illustrated materials. The undecorated vessels of Supe are another point of similarity with Chavín where only a small percentage of the fragments are decorated.

Just why the closest parallels to Chavín ceramics are represented at Early Ancon and Supe fishing sites cannot be answered. Presumably other sites which will help explain this paradox will eventually be found. Again the 1941 excavations of Willey must be awaited for Puerto de Supe conclusions.

## CHAVÍN AND CUPISNIQUE

Cupisnique Quebrada in Chicama Valley contains surface sherds,<sup>4</sup> many of which resemble Chavín. Likewise, complete vessels resembling this style are found in the Chiclin Museum of Sr. Rafael Larco Hoyle and in other Peruvian museum collections. No significant construction nor stone carving has been found, so the comparison is essentially one of ceramics. A comparison of Chavín sherds with one collection from Cupisnique Quebrada shows:

	Chavín		Cupisnique	
	No.	Per Cent	No.	Per Cent
Blackware . . . . .	1374	45.95	412	54.07
Brownware . . . . .	901	30.13	232	30.45
Redware . . . . .	427	14.28	79	10.37
Orangeware . . . . .	272	9.10		
Grayware . . . . .			17	2.23
Two-colorware . . . . .	9	.30	22	2.87
Miscellaneous . . . . .	7	.24		
Totals . . . . .	2990	100.00	762	100.00

<sup>3</sup> Kroeber, 1925a, 255.

<sup>4</sup> See Bennett, 1939, 90-93.

<sup>1</sup> See Strong, 1925.

<sup>2</sup> See Kroeber, 1925a.

A general comparison of Chavín ceramics with Cupisnique, both of the sherds from the Quebrada and the complete vessels from collections, shows a convincing series of similarities and also a fair number of differences. Some of the outstanding similarities are:

1. Black, brown, and redwares in about the same proportion
2. Dominance of incised design as against painted
3. Similarity of design techniques, such as punch, scratch, raised tabs, relief, stamp, and the like
4. Similarity of design elements, such as circles and dots, circle combinations, linear and curvilinear, and broken lines
5. Some similar shapes, such as a few open-bowls, and a constricted-collar jar
6. Painted areas separated by incisions

Such a list of similarities would be sufficient to establish a relationship between the two groups, but the differences must also be considered:

1. At Cupisnique the stirrup-spout is the most characteristic shape. Chavín may have stirrup-spouts, but they are certainly rare.
2. Open-bowls are rare in Cupisnique, characteristic of Chavín
3. Cupisnique incision is fine line in most pieces; Chavín is groove incision
4. Cupisnique designs, especially on complete vessels, are directly comparable to Chavín stone carving designs. Chavín ceramic design does not contain many of these elements.
5. Cupisnique lacks many Chavín ceramic design techniques such as fill of incised line with paint, champlévé, negative painting, ratchet, and stamp punching, thumb-nail impression
6. Cupisnique uses design techniques not found in Chavín, such as fine scratch, cross-hatch, appliqué pellets and strips, modeling

A comparison of Chavín and Cupisnique leaves no doubt of the basic relationship of the two styles. The Cupisnique style differs essentially in the abundance of stirrup-spout vessels as against open-bowls and the use of Chavín stone-carving designs in its incised and relief decoration. No new evidence is available for

the relative ages of the two styles, but the argument that the Chavín ceramic style is older seems to be a simpler one than the reverse.

#### CHAVÍN AND COAST STYLES

With the exception of Ancon and Supe materials the identification of Coast styles with Chavín characteristics is essentially based on the Chavín stone carving style. The Early Chimu pieces in the Uhle Moche collection with Chavín designs, the Lambayeque gold collection from Chongoyape,<sup>1</sup> the relief decorated walls of Nepeña all correspond to the Chavín stone carving style. Furthermore, it must be noted that relatively no variation is presented by these manifestations of Chavín design in such widely separated regions and in such divergent media. The recent work of Larco (1941) presents a far sounder basis for discussing Chavín coastal periods than previously existed, but has not completely clarified the Coast-Highland relationships.

Although, as previously stated, it is premature to give detailed conclusions, the following general statements about Chavín seem valid.

1. Chavín presents a distinct architectural, ceramic, and sculptural style.

2. Materials classified as Chavín style have been found over a wide area in the Andean region. On the coast of Peru evidence of Chavín influence or style has been produced from the Piura Valley on the far north coast to Paracas on the south coast, though with greatest concentration on the central and north coasts. In the highlands the site of Chavín is itself outstanding and there is certain evidence of Chavín influence in the south highlands.

3. Subdivisions of Chavín will be made eventually. There are at least two ceramic styles and two architectural styles.

4. Chavín materials are definitely early on the north coast, preceding the Mochica or Early Chimu period. In general, it appears that Chavín everywhere is definitely early in terms of known Andean periods.

#### WHITE-ON-RED STYLE

The white-on-red style was found in isolated graves at Wilkawain (7H-15) in a mixed house site (9H-2), and in intrusive graves at Chavín. The position of the white-on-red as post-Chavín is well established; otherwise there is no good

local evidence for the relative dating of this style. The following shapes are represented in the collection:

<sup>1</sup> See Lothrop, 1941.

1. Open-bowl. This is by far the commonest shape and consists of a simple open-bowl with convex or flaring sides and with either a flat or rounded base.

2. Double-bowl. One double-bowl has a modeled human head on one side and traces of white-on-red design. It is associated with the isolated white-on-red graves at Wilkawain.

3. Constricted-neck bowl with flat-loop handle

4. A shallow plate with an annular base

5. Shallow plate

6. Small jar with horizontal handle

7. A modeled animal

White-on-red is the only painted design, although some of the vessels are plain red, orange, and brown.

A simple incised design is found on the flat handle of the double bowl. Designs consist of triangles filled with dots, parallel and wavy lines, angular scrolls, and simple daubs. Burials were direct in unprepared tombs; no architectural features could be associated with the style; and no other artifacts besides ceramics could be definitely associated. While not identical with the Coast style found at Chancay, the relationship seems more or less certain. However, further interpretation of the antiquity and position of the white-on-red style must await publication of the important new evidence from the Peruvian coast.

## RECUAY

Recuay style materials were found in our own excavations in stone-lined, subterranean galleries near Wilkawain, in gallery refuse sites near Shankaiyan, and in a mixed house site refuse. The quantity of the materials is not great and the information from excavations leaves much to be desired in the understanding of the complexities of distribution and position of this important style. The Recuay style has been reported in many parts of the Callejón de Huaylas, and local collections contain many examples. Although we examined many sites around the town of Recuay we uncovered no new material. Recuay style has been found east of the Cordillera Blanca and west of the Cordillera Negra, particularly around the site of Aija. Recuay influence has long been noticed in Coast ceramics on the north coast of Peru and recently Rafael Larco Hoyle has reported the discovery of pure Recuay style graves in the lower Santa Valley.

Recuay is represented by a definite ceramic style, an architectural style, and a stone carving style. Although textiles are not preserved, the indirect evidence of stone carving design and ceramic design indicates that they were made. Our own excavations at Shankaiyan add the association of copper pins, needles, and pendants and a few minor shell objects to the Recuay period.

### RECUAY CERAMICS

The materials encountered in our excavations in the Callejón de Huaylas are not sufficient to

give an accurate picture of Recuay ceramics. The refuse material furnished some new data, as will be mentioned later. The grave material conforms in general to the Recuay style as represented in collections elsewhere. Consequently, a brief classification of Recuay ceramics is based on the following material:

	No. of Pieces
Huaraz Museum Collection . . . . .	60
Rafael Larco Hoyle Collection . . . . .	53
Augusto Soriano Infante Collection . . . . .	52
Tomás La Rosa Sanchez Collection . . . . .	51
American Museum of Natural History Collection . . . . .	7
Seler (1893) illustrations . . . . .	51
Tello (1923, 1929, 1930) illustrations . . . . .	56
Wilkawain excavations . . . . .	27
Total . . . . .	357

Most of these collections contain a greater number of pieces than those classified in our hurried survey, and the large Tello Collection in the Universidad de San Marcos is a major omission. None the less, the material is sufficient to give a general view of Recuay ceramics in spite of the fact that most of the pieces in the collections have come from graves, and a great amount of selection has taken place.

The frequency of the types and subtypes as well as the occurrence of various styles of decoration is given in the table which follows the descriptive classification. Fig. 32 shows the major shapes in simple outline. Illustrations can be found in Tello (1923, 1929, 1930) and in Seler (1893).

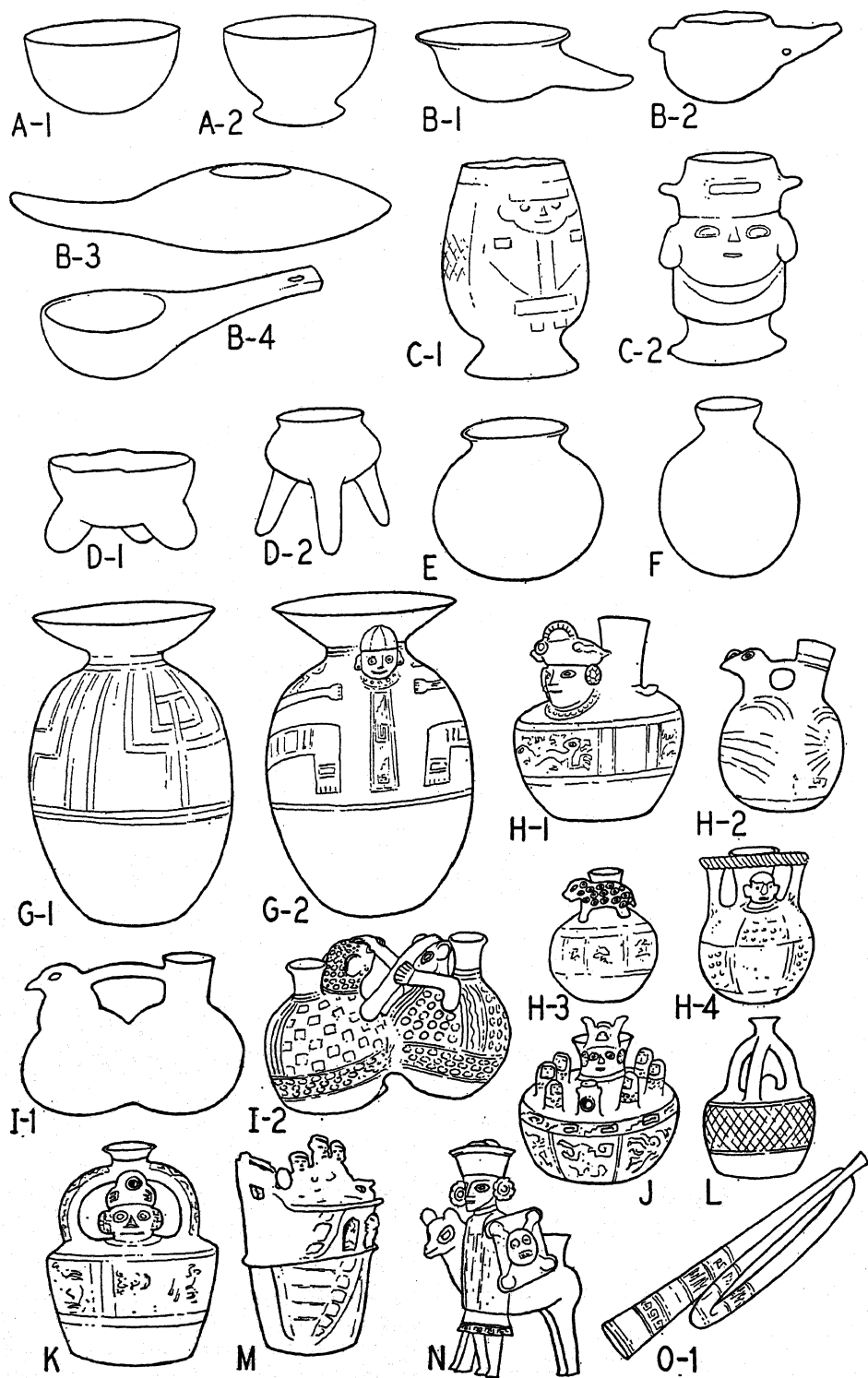


FIG. 32. Recuay ceramic shapes.

Recuay A. Open-Bowls. Simple open-bowls are common in collections and are probably more important than is indicated by the tabular frequency because the collectors are not interested in the plainwares. The refuse material at Shankaiyan contained fragments of many plain bowls and of others with simple red-on-orange design, but most of those in the collections are painted in two- or three-color negative designs, or in red-on-white patterns.

A-1. Plain Bowls. Simple open-bowls with plain edge rims, convex sides, and rounded bases.

A-2. Annular-Base Bowls. Simple open-bowls with plain edge rims, convex sides, and annular bases.

A-3. Miscellaneous. A few variations on the simple open-bowl type occur. One variant is a bowl with a flat base, somewhat vertical sides, and a rim which flares at right angles. Another variant represents an annular-base bowl with a clay trumpet coiled around the outside. The mouthpiece of the trumpet is at the rim edge and the horn is near the base.

Recuay B. Conical Handle Bowls. A hollow or solid conical handle projecting from the side of a bowl is one of the typical features of Recuay ceramics. Several subtypes are distinguishable. Many of these vessels are monochrome and form one category of Tello's Andean Archaic.

B-1. Plain Bowl with Conical Handle. A simple vessel with slightly flaring sides and plain rim edge has a long conical handle projecting from one side near the base.

B-2. Flare-Rim Bowl with Spout and Conical Handle. A small olla-like bowl has a rounded base, convex sides, and a flaring rim. A conical handle projects from one side, and on the opposite side is a short tubular spout.

B-3. Measuring Bowls with Conical Handles. This shape vessel, which is typical of both Mochica and Recuay ceramics, has been called by many names, such as conical-handled dipper, *medida*, and the like. It is a squat vessel with constricted orifice and no neck or rim. The body is usually angular, with a rounded base. A conical handle projects from one side.

B-4. Conical-handled Ladle. A cup-shaped bowl, ladle, or dipper has a long, somewhat conical handle, usually decorated with a modeled head at the end.

Recuay C. Cups or Goblets. A number of deep open vessels are classified as cups or goblets.

C-1. Annular-Base Cup. This vessel has slightly convex sides, a plain rim, and an annular base. Some are decorated with a relief figure on the side, the head extending above the rim edge.

C-2. Head Goblets. Deep goblets with somewhat vertical sides and annular bases have a front view face design which occupies the major part of one side, giving the whole goblet the appearance of a head. The face has some relief features and some painted design. The rim is varied in accordance with the head modeling.

C-3. Crude Cups. Tello's illustrations<sup>1</sup> of his Andean Archaic style include a number of varieties of crude cups. Actually his material forms a distinct group, and a style rarely found in private collections.

Recuay D. Tripod Vessels. Tripod vessels are not too common in the collections examined. All were monochrome.

D-1. Open-Bowl with Tripod. Plain open-bowls have three thick, somewhat cylindrical legs.

D-2. Flare-Rim Bowl with Tripod. A small olla-shaped container with flare-rim has elongated, conical tripod legs.

Recuay E. Ollas. Common olla types are not frequent in the collections, but are found in the refuse sites. Most of them are standard globular-bodied ollas with flaring rims. Some are decorated with painted and relief figures on one side.

Recuay F. Vessels with High Flaring Collars. These vessels have elongated globular bodies and high flaring collars (Pl. 2j). A variant has two flat loop vertical body handles. Many are decorated with negative painted designs.

Recuay G. Flat Disc-Rim Vessels. Exceptionally wide flat disc rims are a characteristic of Recuay. The body of the vessels is frequently globular, with a short collar flaring into the wide disc. A modeled human, bird, or animal head may be under the disc rim, on the shoulder of the vessel, and some have a flat handle from the edge of the rim to the shoulder.

Recuay H. Collar and Short Bridge. Short flat bridges, virtually functionless, are typical of Recuay ceramics. Kroeber suggests that these are probably the residue of a deeply ingrained stylistic trend. Considerable variation in the containers and the details occurs in this

<sup>1</sup> Cf. Tello, 1929, Figs. 49, 89.

category, although the commonest container shape is globular, with a truncated cone base. Many of these vessels are decorated with three-color negative design. Four major subdivisions occur, although all are closely allied.

H-1. Collar and Bridge to Human Head. A straight cylindrical collar is connected to a modeled human head by a short bridge (Pl. 2g).

H-2. Collar and Bridge to Bird Head. Similar to the above, but with a bird head in place of the human head.

H-3. Collar and Bridge to Animal. The collar is connected by a short bridge to an animal head, or to a complete modeled animal.

H-4. Collar and Bridge to Roof. A modeled human head or bust is covered by a roof with pillars. The roof is connected to the spout by a short bridge.

Recuay I. Double Jars. The commonest type of double jar has two oval containers, one with a cylindrical collar spout, the other with a modeled bird head. The head and spout are connected by a very short bridge. Human and animal heads are variants. Some unusual double jars represent two struggling warriors, connected modeled fruits, and copulating figures.

Recuay J. Flat Top Jars with Groups of Small Figures. Hemispherical shaped vessels with somewhat flattened bases and flat tops have slightly flaring collar spouts and groups of small modeled figures on the flattened top. Frequently, one figure is larger than the others and the rest are grouped around it. A short tubular spout may project from one side of the vessel. Practically all of these jars are decorated with three-color negative designs. The small figure modeling and the arrangement of group scenes are Recuay characteristics. Obviously great variation is achieved.

Recuay K. Stirrup-Spouts. Stirrup-spouts are not too common, but occur with sufficient frequency to be considered a characteristic of Recuay. These are not mere copies of the Mochica type. Instead, the two tubes meet in an open bowl-like mouth. Containers are generally squat, and may be decorated with a relief modeled bird head. Containers in the form of a ring, a bent leg, a coiled snake, and other variants are found.

Recuay L. Trifid-Spouts. Three tubes meeting in an open bowl-like mouth occur on ring-shape containers and on other styles.

Recuay M. Modeled Castles. A number of

vessels represent modeled buildings, with steps, shelters, and small modeled figures.

Recuay N. Modeled Llamas. Modeled llama vessels, with positive or negative decoration, can be subdivided into two categories.

N-1. Llama Alone. A llama vessel which in some cases has two heads.

N-2. Llama and Man. A modeled llama with a man standing beside it (Pl. 2h).

Recuay O. Trumpets. Long clay trumpets are fairly typical of Recuay.

O-1. Coiled Trumpet. An elongated trumpet with a complete coil between mouth and horn. Some have negative painted designs.

O-2. Straight Trumpet. Plain orangeware trumpets with a mouthpiece and tube which gradually diverges to the horn is common in the Wilkawain collections (Fig. 18d, i).

Recuay P. Modeled Jars. A number of vessels represent modeled figures (Pl. 2i), arracacha, heads, and the like. None falls into the previous categories and thus all are grouped roughly together.

Recuay Q. Miscellaneous. A number of vessels were represented by a single example in the collections examined. A flaring-sided vessel with wavy rim edge looks like a typical Mochica piece, but has a Recuay design. A squat container with convex sides has a high diverging collar rim giving the appearance of a spittoon. A ring-shaped container has a collar-spout on one side and two modeled bird heads on the other. A tall vessel has a series of bulges from rim to base. Other miscellaneous shapes also occur.

Although the Recuay ceramics in the collections examined by us fall into the shape categories described above, great variety is still possible. Recuay pottery is hand made and the minor variations in shapes, the combinations of small modeled figures, and the range in design are enormous. Many of the pieces are monochrome, including redware, blackware, brownware, grayware, and some whiteware. Monochrome is even more common in the refuse collections at Shangkaiyan. Here plain orange pieces are dominant. Likewise cooking ollas, shallow plates, and open-bowls with simple designs are the most frequent in the refuse collection. In spite of the differences between the refuse collections and the grave material no basis for a chronological division of Recuay is available.

## FREQUENCY OF SHAPE AND DECORATION IN RECUAY CERAMICS

Shape	Totals	Mono-chrome	Two-color Negative	Three-color Negative	Red-on-white	Three-color Positive	Two-color Positive	Incised	Unknown
Recuay A . .	37								
A-1. . . .	16		2	1	4				9
A-2. . . .	18		5	3	4				6
A-3. . . .	3				3				
Recuay B . .	53								
B-1. . . .	17	8		2	1				6
B-2. . . .	11	5	1				1		4
B-3. . . .	19	4	4	8			1		2
B-4. . . .	6	2				1			3
Recuay C . .	23								
C-1. . . .	7			2	3				2
C-2. . . .	6		3	2					1
C-3. . . .	10	10							
Recuay D . .	8								
D-1 . . . .	3	3							2
D-2 . . . .	5	3							3
Recuay E . .	4			1					6
Recuay F . .	28	4	2	13	1	2			
Recuay G . .	19	2	1	15	1				
Recuay H . .	79								
H-1 . . . .	54	7		34	9	1		3	
H-2 . . . .	12	5	2	4				1	
H-3 . . . .	8	1	1	6					
H-4 . . . .	5			5					
Recuay I . .	22	6	2	10	2				2
Recuay J . .	17			16	1				
Recuay K . .	10	2		3	2				3
Recuay L . .	7	4		2					1
Recuay M . .	8	1	4	1	2				
Recuay N . .	16								
N-1 . . . .	8		3	5					
N-2 . . . .	8		1	1	5				1
Recuay O . .	10								
O-1. . . .	3		2		1				
O-2. . . .	7	7							
Recuay P . .	9			5					4
Recuay Q . .	7	1		4					2

Both positive and negative painting are common in the grave ceramics of Recuay. Red-on-white is the commonest two-color painting, although some other combinations are noted, and the three-color positive is black, white, and red. In the refuse material a number of other two-color combinations are all significant, including white-on-orange, black-on-orange, red-on-orange, and red-on-white. The white-on-red as a style, however, does not occur. Two-color negative painting is frequent, but cannot be

isolated as a distinct period style. Three-color negative of black, white, and red is the most typical.

As Tello<sup>1</sup> and Kroeber<sup>2</sup> have pointed out, Recuay painted design hinges around figures of jaguars with combs, condors, and serpents. All of these are highly conventionalized and form a consistent design style. Added to this are

<sup>1</sup> Tello, 1929, 97.

<sup>2</sup> Kroeber, 1930, 103-104.



numerous geometric elements including parallel, straight and wavy lines, cross hatching, scrolls, steps, triangles, circles, diamonds, zig-zag lines, rows of dots, crosses, and the like. The refuse material in general tends to emphasize the simpler geometric designs.

Our excavations furnished no new information on the subject of subdividing the Recuay period. Nothing was discovered which would confirm or deny Kroeber's distinction of a Recuay A and Recuay B, nor Tello's distinction of Andean Archaic and Classical Recuay, in spite of the distinctiveness of the Archaic style.

#### RECUAY SCULPTURE

In the general region of the Callejón de Huaylas are four major types of stone carving with a number of minor variants. Type A (Fig. 33e) is a seated, cross-legged statue found in the Callejón in the vicinity of Huaraz. Statues of this group all have the legs drawn up and crossed with the hands resting on the knees. All are male figures. The heads are enlarged, with straight or slightly flaring noses; round button eyes; simple, slit mouths; and half-moon ears. The headband has simple decorations, frequently in the form of hands. Otherwise, these figures are undecorated. These statues are found in isolated spots around the town of Huaraz and in the local museum, but are not definitely associated with any ruins.

Type B is another kind of seated statue (Pl. 8e, f, g) found in the region of Aija and amply illustrated by Tello (1929). Here the knees are drawn up and the toes turn in, but the legs are not crossed. Hands are represented on the chest, the right hand frequently holding a club and the left hand a shield. A trophy head may be depicted as hanging around the neck. The faces are more elaborately decorated with teeth indicated in the mouth, and the eyes are formed by a double ring. The headband has elaborate decorations, and quite frequently the whole figure, front, sides, and back, is decorated with incised design (Fig. 33d). These statues have been found in association with ruins around Aija, principally that known as Illawain. The statues definitely belong to the Recuay period. Many of the modeled ceramic vessels in Recuay have the same warrior figure with club and shield. Likewise, the detailed, incised design on the statue is in many cases identical with ceramic designs of the Recuay

period. This style of statue has been found only in the Aija region, although the Callejón de Huaylas has some which are variants of the same general theme.

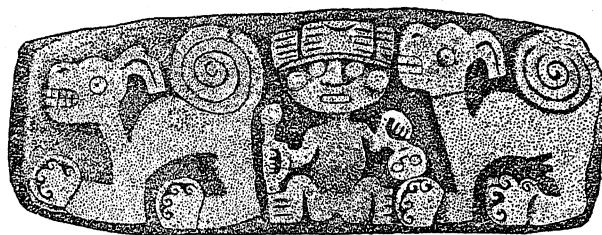
Type C stone carving includes slabs with relief design on one surface (Fig. 33a, b). A common design is a profile feline figure with profile or front view head and it is frequently combined with a small, front view human figure. Type D is a carved stone head on squared tenon for wall insertion (Fig. 33c; Pl. 8d). One group represents human heads with decorated headbands, like the Type A statues; another includes feline heads, like some of those at Tiahuanaco or, more vaguely, like those at Chavín. Of the four major types of stone carving, only the Type B statues can be definitely associated with the Recuay period. The relief slabs of Type C and the heads of Type D are found both in the Aija region and in the Callejón. Both types might be associated with Recuay, but an equally good argument can be advanced that they belong to the Tiahuanaco-influenced Middle period.

#### RECUAY ARCHITECTURE

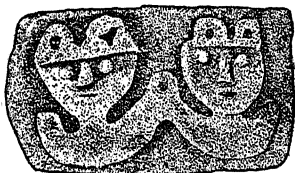
In our own explorations Recuay style materials were associated only with a simple type of subterranean gallery. Near Wilkawain these galleries were from 7 to 20 meters long and at least 1 meter below the surface of the ground. They were entered by stone-lined shafts at one end. The galleries are lined and covered with large flat slabs, with the intervening chinks filled with small stones. The technique is quite distinct from the characteristic one of Chavín. Near Shankaiyan, similar galleries were evidently used as habitation sites, judging by the refuse material found therein. These were much shallower than the burial galleries near Wilkawain. Obviously, Recuay should be associated with some of the other types of buildings found in the Callejón, although we encountered no direct evidence to demonstrate this. Some possibilities will be discussed in the brief section on Callejón architecture.

#### CHRONOLOGICAL POSITION OF RECUAY

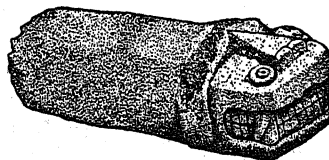
At Wilkawain we encountered a gallery with typical Recuay ceramics stratigraphically under an above-ground house site containing Middle period material. Thus, it is clear that the Recuay period precedes the Middle Tiahua-



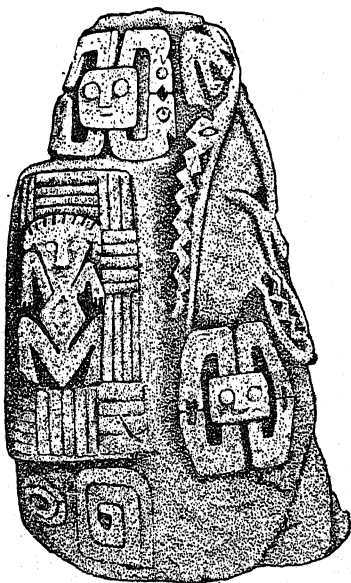
A



B



C



D



E

FIG. 33. Stone carving styles in the Callejón de Huaylas (Huaraz Museum, Huaraz).

naco-influenced period, and the contrast in styles makes the separation more marked. Otherwise, we encountered no evidence for the chronological position of Recuay which would change the arguments presented.<sup>1</sup> It seems obvious that Recuay and Mochica styles are related. Consequently, one is tempted to align them as more or less contemporaneous in a chronological sequence. Recuay is also related

to the Gallinazo style of Viru Valley. We had hoped to isolate the Gallinazo style in the Callejón de Huaylas, but were unable to do so. The position of Recuay between an earlier Chavín and a later Tiahuanaco-influenced period seems probable, although its time relationship to the white-on-red style is still a mystery. Much more work is needed on this important style before a final statement can be made.

## THE MIDDLE PERIODS

Remains of the Tiahuanaco-influenced Middle period are prominent in the Callejón de Huaylas. Available for discussion in this résumé are two categories of material: one, the extensive collections excavated by us in the region of Wilkawain, which form a definite unit and a distinct style in spite of the Tiahuanaco influence; two, Tiahuanaco-influenced material, not of the Wilkawain style, found in collections throughout the Callejón. This second group may or may not represent a period unit, since several styles are included. In both categories, however, the relationship is to the Coast Tiahuanaco periods and not to the site of Tiahuanaco in the highlands of Bolivia. There is no evidence that Tiahuanaco influences reached the north highlands directly and not by way of the coast.

In this résumé we will discuss first the Wilkawain excavated materials and then the miscellaneous Tiahuanaco-influenced materials in collections. We do not have good evidence for chronological subdivisions of the Middle period.

### THE WILKAWAIN MATERIALS

Materials belonging to essentially one style were found in our excavations around Wilkawain in deep, stone-lined and stone-covered tombs; in small, stone-lined, box-like graves, under natural boulders; in the refuse material from one-room, above-ground houses; inside four-room, above-ground houses; and in unprepared graves. The materials themselves have been described in detail in the body of this report and only a brief résumé is needed. A number of ceramic styles are associated in one time period:

1. Redware, usually polished, is represented by constricted-collar jars, open-bowls, and plates, a

<sup>1</sup> Bennett, 1939.

modeled monkey, and other shapes. None of this redware is incised.

2. Blackware is fairly common, either plain or with incised decoration. It differs from the Late Chimu materials of the coast. The shapes include tapering collar jars, bulging collar jars, shallow plates, cups, goblets, double-bowls, and bowls with double spouts and rounded bridges.

3. Two-color negativeware, black on an orange clay base, is represented by two shapes: a high collar jar and a wide, shallow plate

4. Orangeware is common in ollas with two horizontal flat handles, goblets, plates, and shallow sieves

5. A painted ware has Tiahuanaco influence in the design. Color combinations include black, white-on-red; black, white-on-orange; black, white, yellow-on-red; black, gray, yellow-on-red; black, white, yellow-on-orange. Shapes include collar jars, jars with face collars, flare-rimmed bowls, straight-sided cups, double-spout jars, some rare tripod vessels, and modeled puma bowls. The designs resemble the Coast Epigonal styles such as the Nazca Y and Nievería. Clay spoons with a cursive design resembling the Cajamarca style are also associated. Non-ceramic artifacts include copper pins, stone beads, flint and obsidian points, wooden points with gold overlay, and rare pieces of shell.

Except for the lack of clear-cut Tiahuanaco design, this material compares most closely with Strong's Middle Ancon I. The differences are numerous, however, and the addition of two-color negativeware at Wilkawain is a completely new feature. Associations with various types of architecture have been mentioned briefly and will be reiterated shortly.

### OTHER TIAHUANACO-INFLUENCED MATERIALS

A small collection in the Huaraz Museum is said to have come from the site of Patay Katak. Here large stone-lined tombs were found built up above ground and covered with dirt to form

low mounds. The ceramic shapes represented are variants of cups and goblets of good Coast Tiahuanaco pattern, and the designs are equally typical, including such color combinations as black, white-on-red; black, yellow-on-red; black, white, gray-on-red; and black, yellow-on-red. Unfortunately, no further evidence on the associations of this material is available.

Another type of Coast Tiahuanaco material is seen in local collections. This is of the style commonly found in the lower Santa Valley. The vessels are painted in a black, white-on-red design with many checker patterns, lsein, and

small dots. The shapes include double jars with tapered spouts and flat bridges; face-collar jars; globular vessels; face-collar flasks with two small handles at the collar; double-spouted vessels; goblets; a combination of a goblet and a sea lion; and some open-bowls. We have no evidence as to the origin of this material, nor of any associations with architectural style. It is quite possible that the Wilkawain style is the earliest in the Middle period, and that the others follow, although we have no direct evidence for this conclusion.

### CALLEJÓN HOUSE TYPES

A variety of house types and other constructions were observed in our exploration in the Callejón de Huaylas. Without going into elaborate detail, a brief résumé of these house types follows.

Type 1. A one-room stone house above ground is built up of rough stone, with a roof composed of slabs covered with dirt. A low door with a stone lintel is on one side.

Type 2. A two-room above-ground house. Two parallel, gallery-like rooms are roofed with slabs on which is piled a high mound of dirt. The two rooms are connected by an inside doorway and one of them has an exit to the outside.

Type 3. A four-room, above-ground house is similar to Type 2, except that it has four rooms instead of two.

Type 4. Above-ground house with two floors. Each floor may have one or more rooms. In most of those examined by us, two rooms were found on each floor.

Type 5. A three-floor above-ground house. In the two measured by us, each floor had a number of interior rooms. Because of the size of these constructions they have been described as temples.

Type 6. A one-room subterranean house. Three subdivisions are found.

6a. A large, hollowed-out room under a great, surface boulder. The walls are crudely made and the boulder serves as a roof.

6b. A gallery-like subterranean room entered by a shaft at one end which opens in turn into an elongated, rectangular gallery.

6c. The specialized gallery type at Wilkawain, similar to 6b, but differing in detail.

Type 7. A subterranean house with a large central room, plus a series of side niches. The chamber is entered by a special shaft and is covered with great stone slabs. As many as seven niche-like rooms may open off this central chamber.

Type 8. Two-floor subterranean house. Two types were seen by us.

8a. Two gallery-like rooms, one below the other and usually entered by the same shaft.

8b. Two floors, each with a central chamber and small niche-like rooms opening off them. The general distribution of these house types in the five major sites examined by us is given in the following table. These eight major divisions do not represent all of the architectural styles in the Callejón, but only those which we examined.

Period associations cannot be given for all of these types of construction. The possibility is ever present that a house, particularly of the durable, subterranean type, was built in one period and re-used in a subsequent period. The following notes referring to the various types are suggestive, although not completely conclusive. A Type 1 house excavated by us at Wilkawain contained refuse of the Wilkawain-Tiahuanaco style. Another Type 1 house which we opened at Ayapampa contained some poor material which also seemed to be related to the Wilkawain style. Tello<sup>1</sup> reports material of the Tiahuanaco and Inca type in houses of Type 2 at Katak. One Type 4 house was excavated by us at Wilkawain and contained refuse of the Wilkawain-Tiahuanaco style. Furthermore, this

<sup>1</sup> Tello, 1930, 264.

house was stratigraphically over a gallery of Type 6b which contained Recuay material. The three-floor, above-ground temples of Type 5 belong to the Wilkawain-Tiahuanaco period, judging by their relation to other constructions in the region of Wilkawain and by the similarity in architecture. Furthermore, stone puma heads on tenons were at one time inserted in the walls of one of the Wilkawain temples, which is again suggestive of Tiahuanaco. The Macedo Collection of Recuay ceramics in Berlin is said to have come from the Recuay region where practically all the houses are of Type 6b, although examination of three houses revealed no Recuay sherds. Type 6c is definitely Recuay period, according to our Wilkawain data. The Type 6a houses evacuated at Wilkawain contained a

great mixture of sherds from a number of styles, including some Recuay. Both the Santa-type Tiahuanaco ceramics and Recuay vessels are said to have been found at Copa Chica where the houses are all of Types 2 and 3, although in our own survey of this site not even a sherd was discovered. Recuay materials have also come from the Katak region. The one house of Type 8b which we excavated contained sherds of a Late Tiahuanaco style, but this does not prove that the house type belongs exclusively to this period. Some of the house types may represent the Inca period although confirming sherds are not generally found around the ruins. Other construction types are mentioned in the literature, but with no further evidence for identifications with chronological periods.

DISTRIBUTION OF CALLEJÓN HOUSE TYPES

Sites	House Types										
	1	2	3	4	5	6a	6b	6c	7	8a	8b
Wilkawain . . . . .	20		1	2	2	2		15			
Copa Chica . . . . .		33	2								
Ayapampa . . . . .	35										
Katak . . . . .		12							12	1	
Recuay . . . . .							37		1	3	1

### LATE PERIOD AND INCA

A great quantity of Late period material was found at Chavín, including construction work of rough stone facing walls with window niches, stone-covered shallow canals, and stone-lined pits. Late graves were encountered in the Chavín Pits 2 and 3. In the Chavín Pit 3, a house was uncovered which had walls covered with a clay-like plaster. The ceramic fragments for this Late period include a great mass of plainware, mostly from cooking vessels, as well as some simple, painted ware. None of the styles is particularly outstanding. A pair of redware goblets are the most characteristic Inca material found. Various painted sherds at Chavín are similar to those found at San Jerónimo near Huaraz. These were described in the text as being of possible Inca origin, although the style is definitely not that usually identified with the

Cuzco-Inca. It is noteworthy that there is a lack of distinctive Late material in local collections in the Callejón. The Inca are known to have inhabited this region, and some of the construction work at Copa Chica and at Copa Grande appears to be of a generalized Inca type architecture, although identification is uncertain. In fact, the absence of a well-defined Inca period or of any distinctive Late period in the Callejón and at Chavín is surprising. It is, of course, possible that there is no Late period style as distinct as the Late Chimú on the north coast, but rather that the whole era is marked by a general decadence of the Tiahuanaco-influenced Middle period. The results of our exploration do not warrant any definite statement on the status of the Late periods.

## TENTATIVE CHRONOLOGY FOR THE NORTH HIGHLANDS

Inca Period (San Jerónimo style)  
 Late Period (material uncertain)  
 Middle Periods  
   Coast Tiahuanaco (found in collections)  
   Wilkawain-Tiahuanaco  
 Early Periods  
   Recuay  
   White-on-red  
   Chavín

This seems to be the most logical arrangement of the periods on the basis of our evidence. However, it is not altogether satisfactory. While the relative positions of white-on-red and Chavín are confirmed by stratigraphy at Chavín and on the coast of Peru, the position of Recuay in respect to Chavín and the white-

on-red style is still uncertain. Recuay in turn is separated from the Wilkawain-Tiahuanaco by stratigraphy at Wilkawain, but stylistically the two are far apart and one gets the impression that a good part of the intervening history is missing. One would expect some overlap in the two styles, if one immediately followed the other. Likewise, no sound evidence exists for the time relationship of the Wilkawain-Tiahuanaco and the other Tiahuanaco-influenced material in local collections. Late periods are not clearly isolated, nor well defined, and even the Inca identification is in some doubt, although the materials so designated certainly belong in a Late position. Far more detailed excavation is needed before the solution of the chronology of the North Highlands is possible.

## LITERATURE CITED

- ANTÚÑEZ DE MAYOLO, SANTIAGO  
 1935. Las ruinas de Tinyash (Alto Marañón). *Rev. de la Escuela Nac. de Artes y Oficios*, Chorrillos, no. 5.
- BENNETT, WENDELL C.  
 1934. Excavations at Tiahuanaco. *Anthrop. Papers Amer. Mus. Nat. Hist.*, vol. 34, pp. 359-494.  
 1936. Excavations in Bolivia. *Ibid.*, vol. 35, pp. 329-507.  
 1937. Chimu archaeology. *Sci. Monthly*, vol. 45, pp. 35-48.  
 1939. Archaeology of the north coast of Peru. An account of exploration and excavation in Viru and Lambayeque valleys. *Anthrop. Papers Amer. Mus. Nat. Hist.*, vol. 37, pp. 1-153.  
 1942. Chavín stone carving. *Yale Anthropol. Stud.*, vol. 3.  
 1943. The position of Chavín in Andean sequences. *Proc. Amer. Phil. Soc. Philadelphia*, vol. 86, pp. 323-327.
- BORCHERS, PHILIPP  
 1935. *Die Weisse Kordillere*. Berlin.
- CARMAND, A. C. DE  
 1903. *Pérou. Département d'Ancachs*. Lima.
- GARRO, J. E.  
 1940. Notas arqueológicas. Una excursión al norte del Perú. *Rev. del Mus. Nac. Lima*, vol. 9, pp. 263-271.
- GAYTON, A. H.  
 1927. The Uhle collections from Nievería. Univ. California Publ. Amer. Archaeol. and Ethnol., vol. 21, pp. 305-329.
- GAYTON, A. H., AND KROEBER, A. L.  
 1927. The Uhle pottery collections from Nazca. Univ. California Publ. Amer. Archaeol. and Ethnol., vol. 24, pp. 1-46.
- GONZÁLEZ DE LA ROSA, MANUEL  
 1910. Les deux Tiahuanaco, leurs problèmes et leur solution. *Verhandl. des 16 Internatl. Amerikanisten Kongr. Wien*, 1908, pp. 405-428.
- KINZL, HANS  
 1935. Altindianische Siedlungsspuren im Umkreis der Cordillera Blanca. In Borchers, Philipp, *Die Weisse Kordillere*, Berlin, pp. 262-265.
- KREUZ, M.  
 1934. Alte Kulturstätten in der Cordillera Blanca (Peru). *Atlantis*, pp. 599-600.
- KROEBER, A. L.  
 1925a. The Uhle pottery collections from Moche. Univ. California Publ. Amer. Archaeol. and Ethnol., vol. 21, pp. 191-234.  
 1925b. The Uhle pottery collections from Supe. *Ibid.*, vol. 21, pp. 235-264.  
 1926a. Archaeological exploration in Peru. Part I. Ancient pottery from Trujillo. *Field Mus. Nat. Hist. Anthropol. Mem.*, vol. 2, pp. 1-43.  
 1926b. The Uhle pottery collections from Chancay. Univ. California Publ. Amer. Archaeol. and Ethnol., vol. 21, pp. 265-304.

1930. Archaeological explorations in Peru. Part II. The northern coast. Field Mus. Nat. Hist. Anthropol. Mem., vol. 2, pp. 47-116.
- LARCO HOYLE, RAFAEL  
1938. Los Mochicas. Lima, vol. 1.  
1939. Los Mochicas. Lima, vol. 2.  
1941. Los Cupisniques. Lima.
- LOTHROP, S. K.  
1941. Gold ornaments of Chavín style from Chongoyape, Peru. Amer. Antiquity, vol. 6, pp. 250-262.
- MARKHAM, CLEMENTS ROBERT  
1910. A comparison of the ancient Peruvian carvings and the stones of Tiahuanacu and Chavin. Verhandl. des 16 Internatl. Amerikanisten Kongr. Wien, 1908, pp. 389-394.
- MEANS, PHILIP AINSWORTH  
1931. Ancient civilizations of the Andes. New York.  
1934a. Des commentaires sur l'architecture ancienne de la côte Péruvienne. Bull. Soc. Américanistes Belgique, no. 14, pp. 75-110.  
1934b. New clues to early American culture. New York Times Mag., May 20, p. 12.
- MIDDENDORF, E. W.  
1895. Peru. Vol. 3, Das Hochland von Peru. Berlin.
- MUELLE, JORGE C.  
1937. Filogenia de la Estela Raimondi. Rev. del Mus. Nac. Lima, vol. 6, pp. 135-150.
- MUELLE, JORGE C., AND BLAS, CAMILIO  
1938. Muestrario de arte Peruano precolombino. Rev. del Mus. Nac. Lima, vol. 7, pp. 163-280.
- RAIMONDI, ANTONIO  
1873. El departamento de Ancachs y sus riquezas minerales. Lima.
- ROOSEVELT, CORNELIUS VAN S.  
1935. Ancient civilizations of the Santa valley, and Chavín. Geogr. Rev., vol. 25, pp. 21-42.
- SELER, E.  
1893. Peruanische Alterthümer. Berlin.
- SIEVERS, W.  
1914. Reise in Peru und Ecuador. Wiss. Veröffentl. der Gesell. für Erdkunde zu Leipzig, vol. 8, pp. i-xii, 1-411.
- SORIANO INFANTE, AUGUSTO  
1941. Monografía de Ancash: Nepeña (Provincia de Santa). Rev. del Mus. Nac. Lima, vol. 10, pp. 263-277.
- STRONG, WILLIAM DUNCAN  
1925. The Uhle pottery collections from Ancon. Univ. California Publ. Amer. Archaeol. and Ethnol., vol. 21, pp. 135-190.
- TELLO, JULIO C.  
1923. Wira Kocha. Inca, Lima, vol. 1, pp. 93-320, 583-606.  
1929. Antiguo Peru. Lima.  
1930. Andean civilization: Some problems of Peruvian archaeology. Proc. 23d Internatl. Congr. Americanists, New York, 1928, pp. 259-290.
- UHLE, MAX  
1903. Pachacamac. Philadelphia, Univ. Pennsylvania, Department of Archaeology.  
1908. Über die Frühkulturen in der Umgebung von Lima. Verhandl. des 16 Internatl. Amerikanisten Kongr. Wien, 1908, pp. 347-370.  
1913. Die Müschelhügel von Ancon, Peru. Proc. 18th Internatl. Congr. Americanists, London, 1912, pp. 22-45.  
1920. Los principios de la civilizacion en la sierra peruana. Bol. Acad. Nac. Hist. Quito, vol. 1, pp. 44-56.
- VALCÁRCEL, LUIS E.  
1935. Litoesculturos y cerámica de Pukara. Rev. del Mus. Nac. Lima, vol. 4, pp. 25-28.
- WIENER, CHARLES  
1880. Pérou et Bolivie. Paris.

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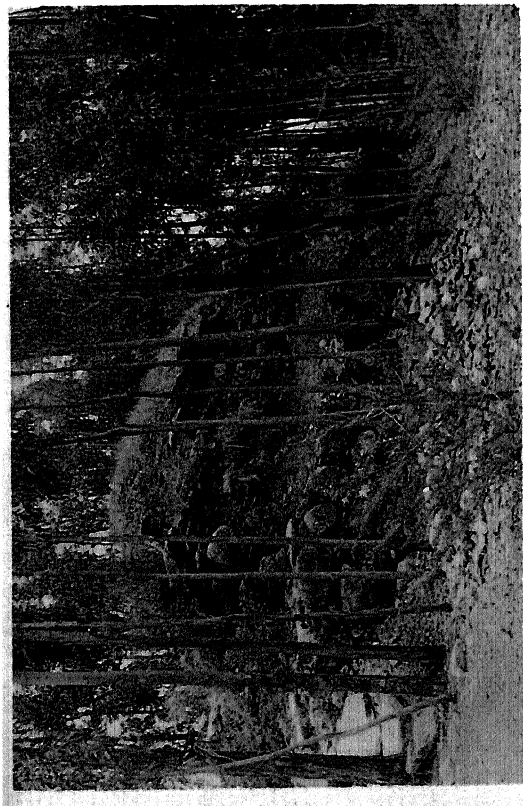
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  - B-1. Site Ch-15 (41.1-3783d)
  - B-2. Site Ch-9 (41.1-3742)
  - B-3. Site Ch-15 (41.1-3783e)
  - B-4. Site Ch-15 (41.1-3781c)
  - B-5. Site Ch-15 (41.1-3783d)
  - B-6. Site Ch-15 (41.1-3781b)
  - C-1. Site Ch-15 (41.1-3783c)
  - C-2. Site Ch-12 (41.1-3764)
  - C-3. Site Ch-11 (41.1-3762)
  - C-4. Site Ch-10 (41.1-3757b)
  - D-1. Site Ch-15 (41.1-3781a)
  - D-2. Site Ch-10 (41.1-3757a)
  - D-3. Site Ch-15 (41.1-3781e)
  - D-4. Site Ch-15 (41.1-3783g)
  - E-1. Site Ch-10 (41.1-3754a)
  - E-2. Site Ch-15 (41.1-3783)
  - E-3. Site Ch-15 (41.1-3781e)
  - A. Site Ch-3A (41.1-3724)
  - B. Site Ch-8A (41.1-3740)
  - C. Site Ch-3C (41.1-3725)
29. Chavín style decorated sherds from Chavín
  - a. Incised circle with dot, Site Ch-15 (41.1-3781f)
  - b. Grooved circle and rectangular punch mark, Site Ch-15 (41.1-3780i)
  - c. Incised circles, Site Ch-15 (41.1-3784b)
  - d. S-shaped punch mark, Site Ch-15 (41.1-3780d)
  - e. Circles between grooves, Site Ch-13 (41.1-3775a)
  - f. Incised circles between grooves, Site Ch-15 (41.1-3780c)
  - g. Incised circles, Site Ch-10 (41.1-3749)
  - h. Thumb-nail impression, Site Ch-15 (41.1-3780b)
  - i, j. Combinations of grooves and punch circles, Site Ch-3 (41.1-3722c, 3722b)
  - k. Combination of groove and punch circles, Site Ch-15 (41.1-3787a)
  - l. Feline incised design, Site Ch-10 (41.1-3746a)
  - m. Groove and dull gouge, Site Ch-2 (41.1-3708ab)
  - n. Champlévé, Site Ch-10 (41.1-3752c)
  - o. Incised design, Site Ch-15 (41.1-3787b)
  - p. Simple stamped design, Site Ch-15 (41.1-3780h)
  - q. Circle and vertical groove, Site Ch-2 (41.1-3700)
  - r. Curvilinear relief, Site Ch-10 (41.1-3746b)
  - s. Grooved lines, Site Ch-15 (41.1-3787d)
30. Chavín style decorated sherds from Chavín
  - a. Raised ridges with cross cuts, Site Ch-3 (41.1-3722)
  - b. Relief tabs with cross cuts, Site Ch-15 (41.1-3780)
  - c. Rough scratch, Site Ch-10 (41.1-3752b)
  - d. Incised dashes, Site Ch-15 (41.1-3780a)
  - e, f, g. Grooves and circle combinations, Sites Ch-8, Ch-15 (41.1-3734, 3784, 3787c)

- h, k. Groove designs, Sites Ch-12, Ch-10 (41.1-3765, 3758a)
- i. Complex groove design, Site Ch-10 (41.1-3758a)
- j. Complex groove design, Site Ch-14 (41.1-3778b)
- l. Suggested negative painted pieces, Site Ch-10 (41.1-3755)
- m. Black and red positive painted with color area separated by grooves, Site Ch-11 (41.1-3762)
- n. Raised band and incised grooves, Site Ch-14 (41.1-3778a)
- o. Groove and punched hole, Site Ch-15 (41.1-3790)
- p. Modeled feline face, Site Ch-16 (41.1-3791)
- q. Grooved circles filled with red paint, Site Ch-15 (41.1-3780e)
- r. Groove and gouge combination, Site Ch-13 (41.1-3775b)
- 31. Post-Chavín ceramic styles from Chavín and San Jerónimo
  - a. Site Ch-16 (41.1-3792a)
  - b. Site Ch-3 (41.1-3728)
  - c. Site Ch-11 (41.1-3761)
  - d. Site Ch-4 (41.1-3732)
  - e. Site Ch-16 (41.1-3792b)
  - f. Site 2H (41.1-3543a)
  - g. Site Ch-3 (41.1-3721)
  - h. Site Ch-2 (41.1-3703)
  - i. Site 2H (41.1-3543f)
  - j. Site 2H (41.1-3543e)
  - k. Site Ch-2 (41.1-3707)
  - l. Site 2H (41.1-3543b)
  - m. Site 2H (41.1-3543g)
  - n. Site 2H (41.1-3543c)
  - o. Site 2H (41.1-3543d)
  - p. Huaraz (41.1-3547n)
  - q. Red-on-white annular-base bowl, Site Ch-5 (41.1-3734)
  - r. White-on-red style vessel, Site Ch-13 (41.1-3770)
- 32. Recuay ceramic shapes
- 33. Stone carving styles in the Callejón de Huaylas (Huaraz Museum, Huaraz)
  - a. Relief carved slab of Style C
  - b. Relief carved slab of Style C
  - c. Carved puma head with tenon for wall insertion, Style D
  - d. Elaborately decorated statue, a variant of Style B
  - e. Simple cross-legged statue of Style A

**PLATES 1-8**





A



B



C



D

View of three-story temple and deep stone-lined tombs at Wilkawain



Wilkawain-Recuay ceramic types



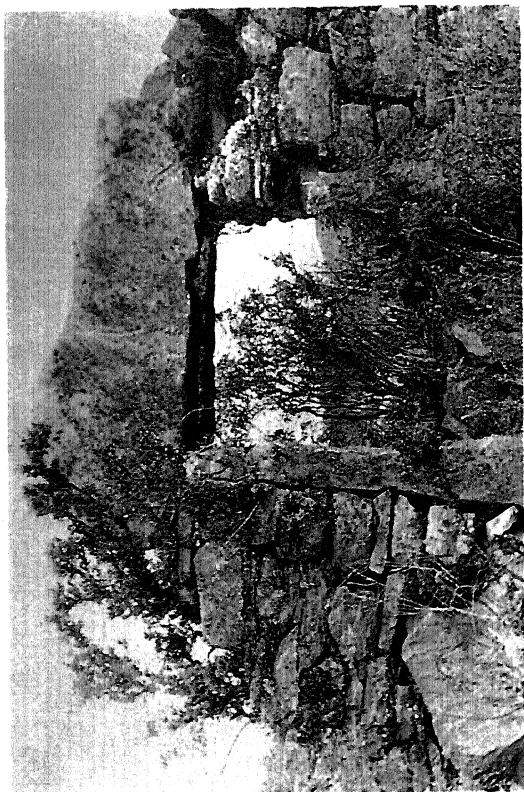
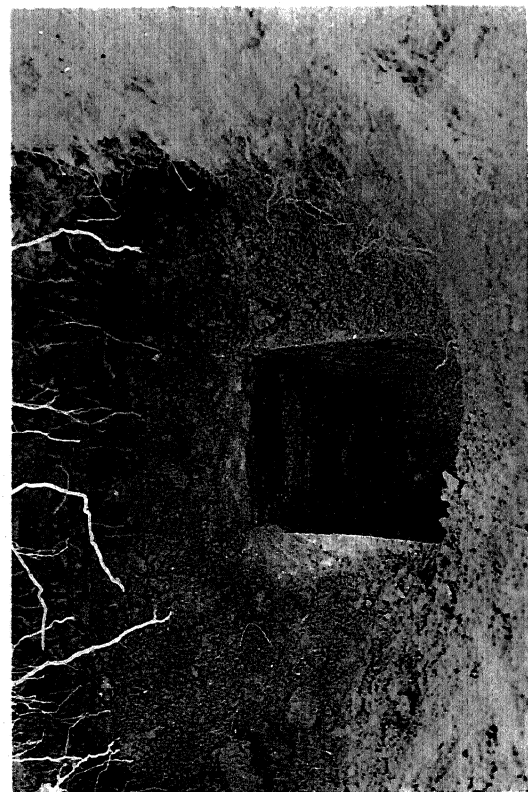
A



B

Subterranean galleries, Wilkawain

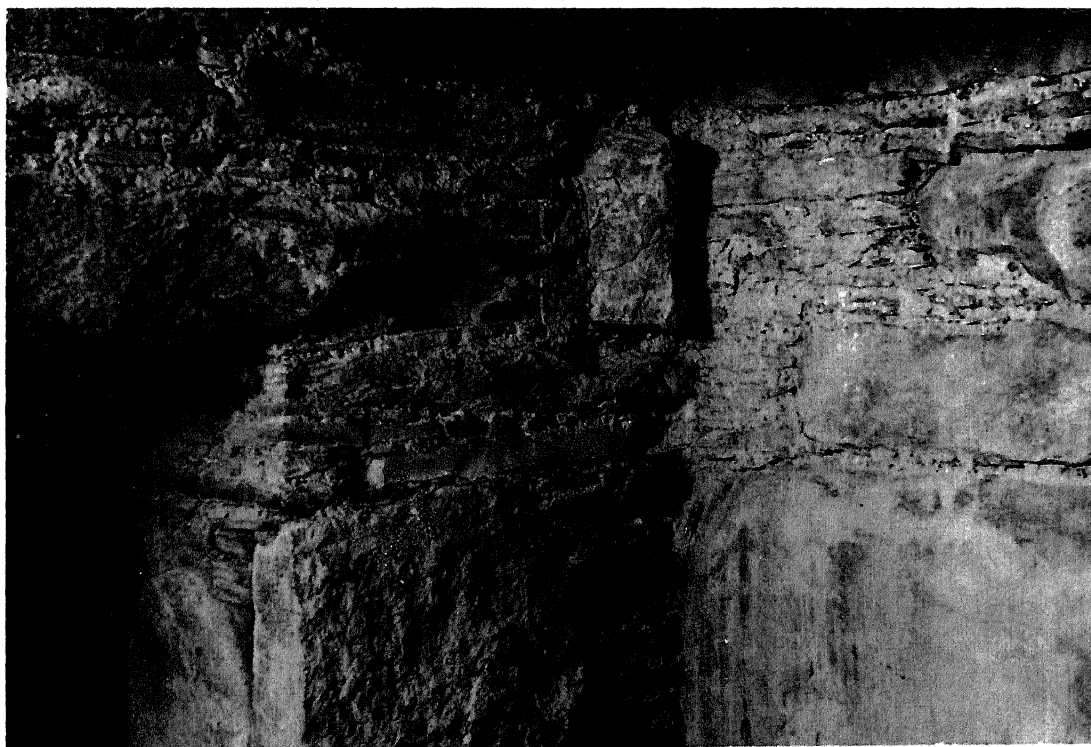




Construction types in the Callejón de Huaylas



A



B

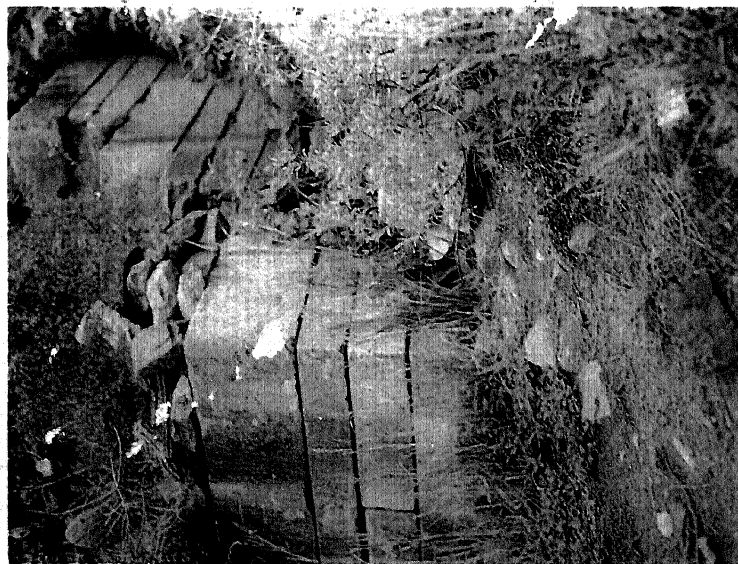
Subterranean houses at Katak



B



D

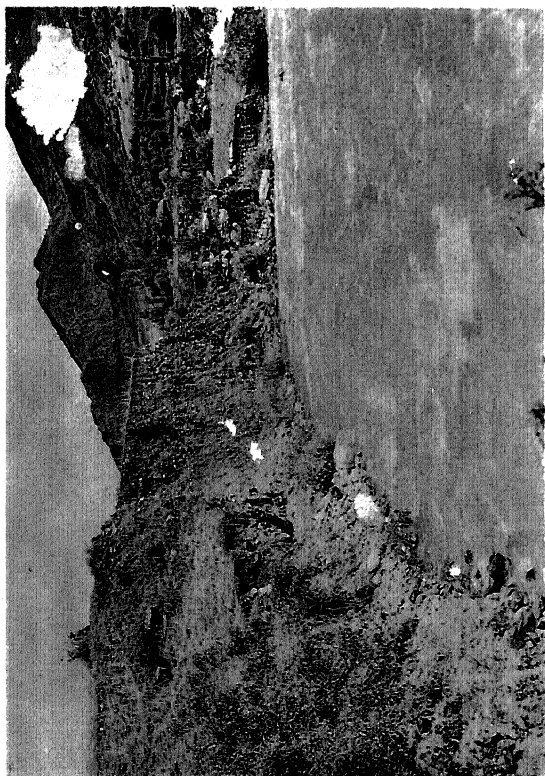
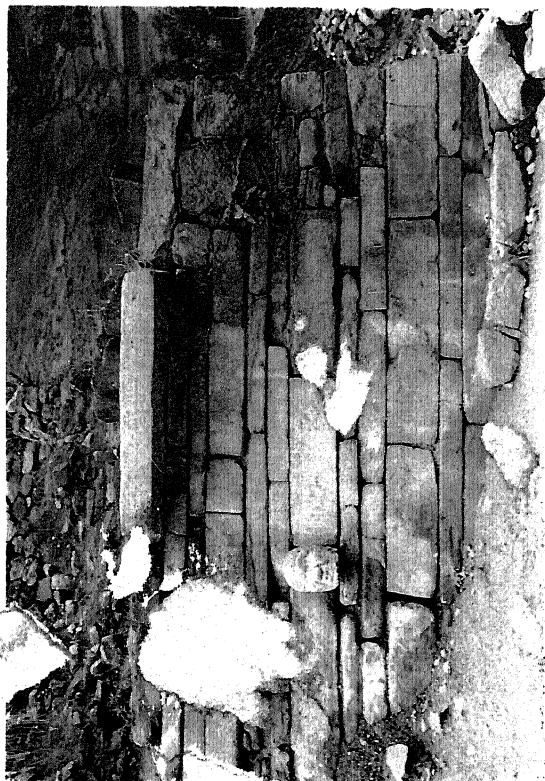
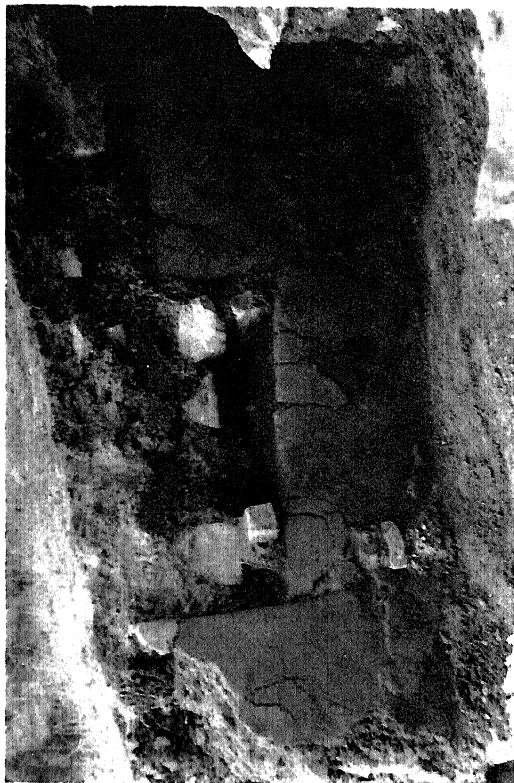


A



C





Views of Chavín



Stone carving of Chavín and Aija













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